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The MERCOSUR and WTO Retreaded Tires Dispute:

Rehabilitating Regulatory Competition in International Trade

and Environmental Regulation

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The MERCOSUR and WTO Retreaded Tires Dispute: Rehabilitating Regulatory Competition in International Trade and Environmental Regulation

by

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Brazil is currently immersed in the project of building a new common market, known as MERCOSUR, with its neighbors Argentina, Uruguay and Paraguay. It has largely been assumed that this project will produce economic growth and therefore be beneficial for the environment. However, this assumption has recently come into question, as a result of Brazilian and Argentinean efforts to regulate the environmental and health risks associated with retreaded tire imports. Despite the protests of environmentalists, MERCOSUR and WTO tribunals have now issued three separate decisions finding that these measures violate international trade rules. This dissertation examines whether these decisions were correctly decided in light of the relevant scholarly literature on the relationship between trade liberalization and environmental protection, and on regulatory competition theory. I argue that the test applied by WTO and

MERCOSUR panels in trade and environment disputes gives insufficient weight to the lessons learned from this literature, and that future panels should adopt a new approach that explicitly draws on these lessons. I then attempt to apply this new approach to the retreaded tire dispute, based on my own examination of the relevant economic and scientific data, and individual interviews I conducted with representatives of the Brazilian government, the Brazilian tire industry, and MERCOSUR.

Keywords: retreaded tires, trade and environment, regulatory competition, MERCOSUR, and WTO.

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The MERCOSUR and WTO Retreaded Tires Dispute: Rehabilitating Regulatory Competition in International Trade and Environmental Regulation

Introduction

Brazil is currently immersed in the project of helping to build a new common market, known as MERCOSUR, with its neighboring countries Argentina, Uruguay and Paraguay. Participation in this project has led to a widespread focus on the need to eliminate barriers to regional trade, including regional differences in environmental regulation. Increased regional trade is widely seen as complementary to environmental protection, based on the assumption that trade will increase the resources available to protect the environment, and that regulatory "harmonization" will ensure more effective environmental protection.[1]

These assumptions have recently come into question in the context of Brazilian efforts to regulate the environmental and health risks associated with retreaded tires. These tires are made from tires that have already been used and are no longer usable, but are then subjected to a reconditioning process that extends their usable life.[2] The use of

[1] For a discussion of the view that trade is beneficial for the environment, see e.g. JAGDISH BHAGWATI, FREE TRADE TODAY (2002).

[2] The reconditioning process involves stripping the worn tread from a used tire's skeleton (casing) and replacing it with new material in the form of a new tread and, sometimes, new material also covering parts

retreaded tires has significant economic benefits, and has become the object of extensive international trade. Over time, however, it has become apparent that retreaded tires are associated with significant health and environmental risks. In response, both Argentina and Brazil banned the importation of retreaded tires. Despite the protests of environmentalists, MERCOSUR tribunals have now issued two separate decisions finding that these import bans violate MERCOSUR rules. In a third case filed by the European Union (EU), a World Trade Organization (WTO) panel has ruled that Brazil's ban on retreaded tire imports also violates WTO rules.

This dissertation examines the question of whether these decisions were correctly decided in light of the relevant scholarly literature. I look first at the literature on the relationship between trade liberalization and environmental protection, and the arguments raised by critics such as Herman Daly, who asserts that "[e]nvironmental degradation is an iatrogenic disease induced by the economic physicians (pro-growth advocates) who attempt to treat the sickness with unlimited wants by prescribing unlimited production."[3] In addition, I examine the literature on regulatory competition theory, based on the work of Charles Tiebout,[4] which asserts that regulatory

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or all of the sidewalls. Under international standards, passenger car tires may be retread only once. See United Nations Economic Commission for Europe (UNECE) Regulation No. 1-9 (1998), p. 6.2.

[3] HERMAN DALY, BEYOND GROWTH (1996) (arguing that "[w]e do not cure a treatment-induced disease by increasing the treatment dosage."); JOSEPH E. STIGLITZ, MAKING GLOBALIZATION WORK 9 (2006) (arguing that the way globalization has been managed leads to the advancement of "material values over other values, such as a concern for the environment or for life itself.").

[4] Charles M. Tiebout, *A Pure Theory of Local Expenditures*, LXIV THE JOURNAL OF POLITICAL ECONOMY 416 (1956) (presenting a solution for the level of expenditures for local public goods which reflects the preferences of the population more adequately than they can be reflected at the national level).

harmonization may actually reduce the level of environmental protection, and that environmental regulation is likely to be most effective when jurisdictions are allowed to adopt competing regulatory approaches.

I argue that international trade tribunals need to pay greater attention to the potential environmental harm that can result from trade, and to the significant welfare gains that can be derived from allowing a proliferation of different environmental standards to be adopted by different governmental authorities. Rather than reflexively assuming that increased trade and harmonization will further environmental protection, tribunals should focus on more detailed analysis of the specific economic, scientific, and political factors involved. I then proceed to conduct my own analysis of these factors. My analysis of the economic and environmental impact of the retreaded tire trade is based on various independent studies conducted by Brazilian and European governmental authorities. My analysis of the politics of the Brazilian measure is based on a series of interviews that I was able to conduct with high-level representatives of the Brazilian government, the Brazilian tire industry, and MERCOSUR.

Chapters I and II discuss the policy debate relating to the relationship between trade liberalization and environmental protection, and the legal framework that has emerged for resolving this conflict in the WTO and MERCOSUR. The discussion in Chapter I relies on the four categories of environment and trade disputes identified by

Edith Brown Weiss and John Jackson:[5] national measures to protect the domestic environment; unilateral national measures to protect the environment outside national jurisdiction; measures authorized by international environmental agreements; and measures regulating processes, as opposed to products. I then review the specific treaty provisions and case law that has emerged with respect to these cases in both the WTO and MERCOSUR. These two chapters show that there are similarities and differences between the WTO and MERCOSUR approach to trade-environment. The WTO and MERCOSUR frameworks both recognize that the goal of economic development must be achieved together with competing goals such as the protection of the environment. In addition, the WTO and MERCOSUR both provide exceptions to the general goal of trade liberalization in order to protect the environment. Moreover, like the WTO Dispute Settlement Understanding, MERCOSUR dispute settlement also permits disputes to be settled by ad hoc trade panels, subject to review by a permanent Appellate Body. There are, on the other hand, important differences between the WTO and MERCOSUR approaches to trade-environment. In the WTO, measures must be "necessary" to protect human, animal or plant life or health, or "relating to" exhaustible natural resources. In addition, these measures need to be applied in a manner that is not "unjustifiable or arbitrary discrimination" or a "disguised restriction on international trade." The MERCOSUR exception applies to measures "destined to" protect life and health of persons, animals and plants, and has no provision with regard to the way in which the

[5] Edith Brown Weiss & John H. Jackson, *The Framework for Environment and Trade Disputes, in* RECONCILING ENVIRONMENT AND TRADE 27-28 (Edith Brown Weiss & John H. Jackson eds., 2001).

measure must be applied. In addition, MERCOSUR case law is much less developed than that of the WTO. Finally, unlike the WTO, MERCOSUR has produced a number of legal instruments that deal directly with environmental policy.

Chapters III and IV deal with the specific decisions issued in the WTO and MERCOSUR in the retreaded tire dispute. It explains the standards and reasoning applied by the tribunals in these cases, and the regulatory changes produced in Brazil by these decisions. There are similarities between the WTO and MERCOSUR decisions. Both failed to take into account the actual economic impact of the import bans; the political situation that led to the adoption of the bans; and the potentially negative consequences that these decisions might have on support for MERCOSUR and WTO in these countries. On the other hand, it could be concluded that the WTO approach pays closer attention to environmental concerns than that of MERCOSUR, because the WTO decision found that the Brazilian import ban could be justified as a measure "necessary" to protect human, animal or plant life or health. However, the WTO panel did not uphold the import bans, because of the fact that the Brazilian courts continue to allow imports of used tires. The panel found that this fact rendered the application of the measure an arbitrary and unjustifiable discrimination and a disguised restriction on international trade.

Chapter IV then reviews the economic and legal literature on regulatory competition as an alternative to regulatory harmonization. I begin with Charles Tiebout's

seminal work on inter-jurisdictional competition, and the conflicting responses articulated by other economists. I then look at the way in which the debate over regulatory competition theory has been incorporated into U.S. legal scholarship concerning "environmental federalism."[6] I conclude by explaining the extent to which this debate is relevant to the WTO and MERCOSUR, and the specific lessons that WTO and MERCOSUR tribunals should learn from this literature.

Chapter VI applies the lessons identified in Chapter V to the tire dispute. Using economic studies, I show that the impact of the Brazilian import ban on trade was relatively small. Using environmental and scientific studies, I show that that the environmental risks associated with imports of retreaded tires were certain and significant. Based on Brazilian governmental studies and on my interviews with representatives of the Brazilian government, I show that less-restrictive alternatives would be less effective in regulating these risks. Based on the results of my interviews with representatives of the Brazilian government, the Brazilian tire industry, and MERCOSUR, I show that the ban was not aimed at protecting the domestic retreaded tire industry and that the WTO and MERCOSUR decisions have undermined political support for international institutions that badly need such support. I argue that this analysis suggests that the WTO and MERCOSUR decisions may have been wrongly

[6] *See* Richard L. Revesz, *Federalism and Interstate Environmental Externalities*, 144 U. PA. L. REV. 2341, 2343 (1996) (criticizing the various approaches that federal environmental laws have taken to address the problem of interstate externalities).

decided, and that these tribunals should adopt a different approach in future disputes involving conflicts between trade and environmental goals.

Chapter I. The WTO Trade and Environment Linkage Debate

In this chapter, I explore the fundamental elements of the trade-environment debate, and the four principal types of conflicts that have arisen in this area. I then discuss the GATT and WTO treaty provisions and jurisprudence related to this debate.[7]

A. The Policy Debate

In an influential article, Professor Jagdish Bhagwati argues that free trade requires harmonization of domestic institutions, policies (including environmental policies), and practices.[8] His analysis centers on the factors behind the demands for reduced diversity among trading nations.[9] Economics arguments, next to philosophical, structural and political arguments produce and demand harmonization among trading nations.[10] The

[7] The amount of scholarly writings is massive. For some leading examples, see John H. Jackson, *World Trade Rules and Environmental Policies: Congruence or Conflict?* 49 WASH. & LEE L. REV. 1227 (1992); DANIEL C. ESTY, GREENING THE GATT: TRADE, ENVIRONMENT AND THE FUTURE (1994); Thomas Schoenbaum, *International Trade and Protection of the Environment: The Continuing Search for Reconciliation*, 91 AM. J. INT'L L. 268 (1997); Robert E. Hudec, *GATT Legal Restraints on the Use of Trade Measures against Foreign Environmental Practices, in* 2 FAIR TRADE AND HARMONIZATION 95 (Jagdish Bhagwati & Robert Hudec eds., 1996); Patricia Isela Hansen, *Transparency, Standards of Review, and the Use of Trade Measures to Protect the Global Environment*, 39 VA. J. INT'L L. 1017, 1048 (1999) [hereinafter *Transparency*]. For a study on the actual role of trade leverage in promoting environmental cooperation in practice, see DUNCAN BRACK, INTERNATIONAL TRADE AND THE MONTREAL PROTOCOL xvii (1996) (contradicting the conventional wisdom that environmental trade leverage is either unnecessary or ineffective). For a more policy-oriented approach of the many debates within the trade and environment conflict, see Gregory Shaffer, *The World Trade Organization under Challenge: Democracy and the Law and Politics of the WTO's Treatment of Trade and Environment Matters*, 22 HARV. ENVT'L. L. REV. 1 (2001).

[8] *See* Jagdish Bhagwati, *The Demands to Reduce Domestic Diversity among Trading Nations, in* FAIR TRADE AND HARMONIZATION: PREREQUISITES FOR FREE TRADE? 9 (Jagdish N. Bhagwati & Robert E. Hudec eds., 1996).

[9] *Id.*

[10] *Id.*

economic arguments in favor of harmonization arise from the concern that mutually gainful trade between voluntarily trading nations may not survive if there is diversity in domestic policies among the trading nations.[11] Economists fear that the effects of trade policies can be nullified or impaired by domestic actions (the idea of equivalence).[12] Economists have also raised the concern that, "whereas the conventional economic view is that free trade between nations is to their mutual advantage, amounting to a positive-sum game, this belief need not be so when these nations have different domestic institutions and policies behind their borders."[13]

Accordingly, trade and environmental disputes are nothing more than a country's imposition of environmental regulation that nullifies or impairs trade with other nations. In the clash between trade and environmental interests, countries may come to the conclusion that no trade is good trade, thus deciding that trade liberalization is bad. On the other hand, countries may find middle ground in sustainable development, where they may pursue the goal of economic development with an eye on environmental

[11] *Id.* at 23.
[12] With regard to the fear that the effects of trade policies can be nullified or impaired by domestic actions, Professor Bhagwati notes that there are instances where trade concessions can cause a systemic problem to countries not ready to make commitments of market access. Inside and outside the GATT/WTO system, this concern has appeared in at least four different situations: state trading, trade with the former centrally planned economies, trade with the developing countries, and trade with Japan. These four situations indicate that markets need to function adequately, or the free trade system will be nullified or impaired. *Id*.at 23-24.
[13] The fear is that lack of harmonization will not create a favorable distribution of the gains from trade. *See* Jagdish Bhagwati, *The Demands to Reduce Domestic Diversity Among Trading Nations, in* FAIR TRADE AND HARMONIZATION: PREREQUISITES FOR FREE TRADE? 29 (Jagdish N. Bhagwati & Robert E. Hudec eds., 1996).

conservation.[14] Esty advances the argument that "trade is pro-environment,"[15] where both trade liberalization and environmental protection are directed toward the efficient use of natural resources. Under this rationale, trade generates wealth that will be employed to address environmental problems.[16] In other words, trade liberalization will work for the environment provided that market forces are properly channeled. However, many environmentalists are skeptical about these supposed benefits in practice, for fear that the invisible hand of the market is guided by profit rather than environmental concern.[17]

According to Professor Esty, the implementation of the polluter-pays principle is central to reconciling trade and environmental policy goals,[18] where those who caused the damage internalize the environmental harm. The key issue, however, is whether the prices assigned by businesses and the public in general include the often-unaccounted burdens imposed on third parties through environmental spillovers. Market forces may not protect the environment if pollution effects and natural resources are improperly priced or given no value at all.[19] In other words, because so many resources are improperly priced, market forces cannot presently be relied upon to allocate scarce natural resources efficiently or to guarantee that polluters will face real incentives to minimize their emissions.[20] From Professor Esty's standpoint, the use of trade penalties

[14] ESTY, GREENING THE GATT, *supra* note 7, at 61.
[15] *Id.* at 63.
[16] *Id.*
[17] *Id.* at 64.
[18] *Id.* at 65.
[19] ESTY, GREENING THE GATT, *supra* note 7, at 66.
[20] *Id.* at 67.

to enforce environmental agreements or to promote environmental goals constitutes second-best policy mechanisms. [21]

Moreover, Professor Esty identifies seven origins of the trade-environment conflict:[22] rising environmental interest, dispute over the ends and means of environmentalism, ecological interdependence, economic interdependence, evolving threats to freer trade, and two triggering events: NAFTA and the *Tuna-Dolphin* case. Rising environmental interests have been characterized by the call for sustainable development, that is, the need to pursue economic growth while not disregarding environmental protection,[23] and by the widespread recognition that the Earth has a limited capacity to absorb pollution.[24] The dispute over the ends and means of environmentalism identifies the inadequacy of command and control tools and the need for reorientation of environmental regulation toward incentive-based programs and the use of market forces to support environmental protection.[25] Ecological interdependence addresses the inability of the world community to systematically respond to matters such as the spillover effects of pollution.[26] Esty argues it has become more apparent that coordinated environmental programs are required to address global problems.[27] According the Esty, the trade and environment conflict can also be attributable to the

[21] *Id.* at 69.
[22] *Id*. at 10-36.
[23] *Id.* at 10.
[24] ESTY, GREENING THE GATT, *supra* note 7, at 11.
[25] *Id.* at 16.
[26] *Id.* at 18.
[27] *Id*. at 19.

growing economic interdependence of the world's major economies.[28] In other words, trade and environmental policymaking have become interconnected in the sense that countries with less stringent environmental standards are perceived as ideal locations to externalize pollution costs and as an alternative to gaining competitive advantages over the rest of the players in the market.[29]

In addition, Esty argues that there are at least two evolving threats to freer trade that contribute to the trade-environment debate: a changing international scene and the shift in the axis of international tension.[30] The end of the Cold War and the consequent dominance of the market-based capitalism changed the international trade scene.[31] As a consequence, new strategic issues were raised, including environmental concerns. Esty also identifies a shift from the East-West (communism versus capitalism) conflict to North-South (developed versus developing nations); whereas the North perceives Southern countries as not wishing to slow down growth through non-environmentally friendly ways, the South views Northern countries' demands for environmentally-sensitive policies with suspicion.[32]

Finally, Esty outlines two triggering events changed the trade-environment debate: NAFTA and the GATT *Tuna-Dolphin* dispute. During the negotiation stage of

[28] *See id.* at 20.
[29] ESTY, GREENING THE GATT, *supra* note 7, at 20-21.
[30] *Id.* at 25-26.
[31] *Id.*
[32] *See id.*

the NAFTA, the environmental community in North America demanded a green trade agreement for the region, which afterwards became the North American Agreement on Environmental Cooperation (NAAEC).[33] Before NAFTA, environmentalists paid little attention to trade issues.[34] The GATT *Tuna-Dolphin* decision, which found the United States in violation of the GATT 1947 for imposing a ban on tuna importation from Mexico because it used fishing practices that harmed and killed dolphins, demonstrated that GATT's efforts to address mixed questions of trade and environmental policy were highly problematic.[35]

Others have argued that the origins of the trade and environment conflict are a clash of cultures between environmentalists and free traders.[36] Environmentalists are process-oriented and they perceive themselves to be pursuing moral imperatives that cannot be easily traded off in economic terms.[37] Free traders, on the other hand, are outcome-oriented, utilitarian, and focused on increasing economic welfare by lowering

[33] On the North American Agreement on Environmental Cooperation, see Patricia Isela Hansen, *The Interplay Between Trade and Environment Within the NAFTA Framework*, *in* ENVIRONMENT, HUMAN RIGHTS AND INTERNATIONAL TRADE 339 (Francesco Francioni ed., 2001); Paul Stanton Kibel, *The Paper Tiger Awakens: North American Environmental Law After the Cozumel Reef Case*, 39 COLUM. J. TRANSNAT'L L. 395 (2001); Beatriz Bugeda, *Is NAFTA Up to Its Green Expectations? Effective Law Enforcement under the North American Agreement on Environmental Cooperation*, 32 U. RICH. L. REV. 1591 (1999); Fabio Morosini, *Repensando Estratégias de Regulação Ambiental: Lições a partir da Experiência da União Européia e do NAFTA* [*Rethinking Regulatory Strategies for the Environment: Lessons from the European Union and NAFTA*], 38 REVISTA DE DIREITO AMBIENTAL [ENVIRONMENTAL LAW REVIEW] 66 (2005).
[34] *See* ESTY, GREENING THE GATT, *supra* note 7, at 27.
[35] *Id.* at 31.
[36] *Id.* at 36.
[37] *Id.*

trade barriers.[38] While environmentalists believe that the use of trade penalties to enforce environmental standards is justified, free traders sustain that excessive deference to environmental regulations or standards may result in trade distortion not justified by environmental results.[39]

B. GATT/WTO Jurisprudence

Professors Edith Brown Weiss and John H. Jackson lay out the main types of disputes involving conflicts between environment and trade.[40] The four kinds of disputes involve national measures to protect the domestic environment; unilateral national measures to protect the environment outside national jurisdiction; measures called for by

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[38] *Id.*

[39] ESTY, GREENING THE GATT, *supra* note 7, at 38.

[40] *See* Weiss & Jackson, *supra* note 8 at 27-28. For a somewhat different conceptualization of the environment and trade conflict, see Joost Pauwelyn, *Recent Books on Trade and Environment: GATT Phantoms Still Haunt the WTO*, 15 EUROPEAN JOURNAL OF INTERNATIONAL LAW 575 (2004). Pauwelyn divides the tension between trade and environment in the following manner: "First, treaties liberalizing trade can harm the environment. In this sense, trade and environment may conflict in at least four ways:

(i) more trade and economic activity may result in more environmental degradation;
(ii) the competition brought about by free trade may put pressure on governments to lower environmental standards (the so called 'race to the bottom');
(iii) trade agreements may prevent governments from enacting certain environmental regulations; and
(iv) trade law may prohibit the use of trade sanctions or preferences, be it as sticks or carrots to ensure the signing up to, or compliance with (international) environmental standards.

Second, trade restrictions or distortions can harm the environment. In this sense, trade liberalization and environmental protection go hand in hand in at least three ways:

(i) trade liberalization should lead to higher levels of development and make available resources for environmental protection (the Environmental Kuznets Curve);
(ii) trade-distorting subsidies and other support for over-production (activities generally disliked by trade law), be it in the fisheries or agricultural sectors, can deplete environmental resources; and
(iii) trade restrictions on the provision of cross-border services or technology to recycle or otherwise limit environmental harm can delay or prevent the efficient protection of the environment." *Id.* at 578.

international (multilateral) environmental agreements; and measures that regulate the process used to make an imported product, as opposed to the characteristics of the imported product itself. I review representative cases of the GATT/WTO jurisprudence in order to show the development of the treatment of environmental and public health claims brought before the GATT/WTO. Although this review shows an increasing acceptance of environmental interests in trade disputes, the WTO is still reluctant to accept legitimate environmental defenses as exceptions to free trade between its member countries.

1) National Measures to Protect the Domestic Environment

Under this category of trade and environmental conflict, states adopt environmental laws or regulations and foreign parties challenge these measures in light of their inconsistency with the text of GATT 1994 or the Agreements on Technical Barriers to Trade (TBT) and on the Application of Sanitary and Phytosanitary Measures (SPS). The rationale for such types of measures normally is that "the product is restricted for sale domestically, and imports should not be able to threaten human health and the environment in ways that the same domestic products cannot."[41] This category of conflict has been brought to the attention of the GATT and WTO dispute settlement bodies in at

[41] *Id.* at 28.

least three prominent disputes: the *Thai Cigarette* case,[42] the *Reformulated Gasoline* case,[43] and the *Beef Hormones* case.[44]

a. The *Thai Cigarette* Case[45]

In the *Thai Cigarette* case (a pre-WTO case), the main issue under consideration was whether Thai restrictions on the import of tobacco and tobacco products were legitimate measures to protect public health. Between 1966 and the late 1980s, Thailand granted only three import licenses for cigarettes.[46] Domestic demand was supplied by national monopolies and import control measures, such as high tariffs, discriminatory taxes, and discriminatory marketing.[47] At the same time, with the steady decline in consumption of cigarette in the US, American cigarette companies sought to expand their markets in Japan, South Korea, Taiwan, and Thailand.[48] The conflict between US attempts to enter the Thai tobacco market and Thailand's refusal to import US cigarettes gave rise to GATT proceedings initiated by a US complaint.

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[42] Panel Report, *Thailand – Restrictions on Importation of Internal Taxes on Cigarettes*, DS10/R-37S/200 (Nov. 7, 1990) (GATT document) [hereinafter *Thailand – Cigarettes*].
[43] Appellate Body Report, *United States – Standards for Reformulated and Conventional Gasoline*, WT/DS2/AB/R (Apr. 29, 1996) [hereinafter *US – Reformulated Gasoline*].
[44] Report of the Appellate Body, *EC Measures Concerning Meat and Meat Products (Hormones)*, WT/DS26/AB/R and WT/DS48/AB/R, AB-1997-4 (Jan. 16, 1998) [hereinafter *EC – Hormones*].
[45] *Thailand – Cigarettes*, *supra* note 235. *See also* Weiss & Jackson, *supra* note 8, at 41-44.
[46] *Id.* at 42.
[47] *See* Young Duk Park, *The Thai Ban on Cigarettes Case: A Current Critique , in* RECONCILING TRADE AND ENVIRONMENT 5 (Edith Brown-Weiss & John H. Jackson eds., 2001) [hereinafter *The Thai Ban on Cigarettes Case*].
[48] *Id*. at 47-48.

The US argued that the restrictions on imports of cigarettes by Thailand were inconsistent with Article XI of the GATT 1947, which provides for the general elimination of quantitative restrictions. In addition, the complaining party alleged that the Thai measures were not justified by the exceptions contained in Article XI:2(c), which exempts certain agricultural products from the prohibition on the use of quantitative restrictions, or under Article XX(b), which allows the use of measures necessary to protect human health. Lastly, the US argued that Thailand's Protocol of Accession did not cover the Thai measures, and that Thailand's excise tax and its business and municipal taxes on cigarettes were inconsistent with GATT Articles III:1 and III:2, which require national treatment[49] of internal taxation. Thailand argued that the challenged measures fell within the range of GATT's Article XX (b) measures necessary to protect human life or health, and requested that the panel consult with the World Health Organization (WHO) about technical aspects of the case.

The Panel held that the Thai measures were a quantitative restriction on the importation of cigarettes inconsistent with Article XI:1 and not justified under Article XI:2(c), Article XX(b), or Thailand's Protocol of Accession.[50]

Article XX of the GATT states that:

[49] The National Treatment obligation requires WTO members to accord imported products treatment "no less favorable" than that accorded to "like products" of national origin.

[50] During the Panel review, in July 1990, the Thai government introduced a measure to ban business and municipal taxes on cigarettes that exceeded taxes applied to domestic cigarettes. As for the import prohibition on cigarettes, the Thai government lifted the ban and revised its laws and regulations to conform national treatment obligations. On November 7, 1992, the GATT Council adopted the report.

> Subject to the requirement that such measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade, nothing in this Agreement shall be construed to prevent the adoption or enforcement by any contracting party of measures:
> …
> (b) necessary to protect human, animal or plant life or health;
> …
> (g) relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption[.]

The Panel accepted Thailand's argument that smoking constitutes a serious risk to human health and that, consequently, measures pursuant the reduction of cigarette consumption falls, *a priori*, within the range of GATT's Article XX(b) measures designed to protect human health.[51] In order to interpret the meaning of the term "necessary" in Article XX(b), the Panel adopted the "least-inconsistent test"/"least trade restrictive test" from a precedent in the US Section 337 Case.[52] This case, which involved a dispute between the U.S and the E.C. over patent infringement, discussed the meaning of the term "necessary" in the context of Article XX(d) of the GATT which exempts from GATT consistency measures that are "necessary to secure compliance with laws or regulations that are not inconsistent" with the provisions of the General Agreement.[53] In the *Thai Cigarette* case, the Panel concluded that it "could see no reason why, under

[51] *See* Park, *supra* note 47, at 50.
[52] Panel Report, *United States – Section 337 of the Tariff Act of 1930*, GATT Doc. L/6439 (Nov. 7, 1989), P 5.26.
[53] *Id.*

Article XX, the meaning of the term 'necessary' under paragraph (d) should not be the same as in paragraph (b)."[54]

According to the test, the import restrictions imposed by Thailand could be considered to be necessary in terms of Article XX(b) only if there were no alternative measure consistent with the GATT, or less inconsistent with it, which Thailand could reasonably be expected to employ to achieve its health policy objectives.[55]

According to the United Sates, the Thai measures were unjustified because of the existence of alternatives consistent with the GATT.[56] Thailand, on the other hand, argued that the measures met the "necessary test" because they achieved the public policy objective of reducing the consumption of tobacco and protecting the public from harmful ingredients in imported cigarettes.[57]

Thailand argued that opening its cigarette market to imports would run against Thai's public health policies oriented toward decreasing total cigarette sales and health risks from smoking, and protecting its citizens from harmful ingredients in imported

[54] *Thailand – Cigarettes*, *supra* note 42, P 74.
[55] *See id.*
[56] *See* Park, *supra* note 47, at 51.
[57] *Id.*

cigarettes. Under this scenario, Thailand stated that prohibiting cigarette imports was its only option.[58]

The Panel applied the "least-inconsistent test" to the Thai measures and concluded that there existed quantity-related alternatives less trade restrictive consistent with Article XX(b). Namely, the Panel stated that Thailand could use the Thai Tobacco Monopoly to regulate overall supply of cigarettes, their retail availability, and their prices, provided that it treats imported cigarettes no less favorably than it treats domestic cigarettes.[59] In addition, in order to reduce cigarette consumption in Thailand, the Panel recommended the adoption of a price-raising policy suggested by the WHO.[60]

Moreover, the Panel, applying the "least-inconsistent test," concluded that there existed at least one quality-related alternative to the Thai measures consistent with Article XX(b).[61] Thus, the Panel suggested a non-discriminatory regulation requiring full disclosure of ingredients, in addition to a ban on unhealthy substances.[62] Accordingly, the Panel concluded that there existed various alternatives – less trade restrictive and

[58] *Id*. at 52-53.
[59] *Id.* at 53.
[60] *Id.*
[61] *See* Park, *supra* note 47, at 55.
[62] *Id.* Park heavily criticizes this finding, because the Panel did not take into consideration Thailand's economic constraints to implement the alternative measure. As he states: "[I]f an enormous budget and well-trained human resources were needed to institute and maintain the regulatory system requiring this "complete" disclosure of cigarette ingredients, it would be very difficult for a developing country facing fiscal constraints to implement that alternative effectively and completely…." Hence, "[t]he 'least-inconsistent' test proposed by the *Thai Cigarettes* case is unworkable because the test does not address the issue of feasibility and efficiency in implementing measures in a particular country." *Id*. at 63-64.

economically feasible – consistent with the test of Article XX(b) of the GATT, readily available to Thailand.

The test used in the *Thai Cigarette* Case to determine the meaning of the term "necessary" in Article XX(b) of the GATT has had great impact on subsequent panels. In the *Tuna-Dolphin I* case, for instance, the Panel concluded that measures inconsistent with the GATT were only acceptable "to pursue overriding public policy goals to the extent that such inconsistencies were unavoidable."[63] In other words, a valid Article XX(b) exception requires the country to have exhausted all other alternatives available to reaching the policy objective pursued.[64]

b. The Reformulated Gasoline Case[65]

[63] Panel Report, United States – Restrictions on Imports of Tuna, Aug. 16, 1991, GATT B.I.S.D. (39th Supp.) at 155, P 5.27 (unadopted Panel Report), *reprinted in* 30 I.L.M. 1594 (1991) [hereinafter *US – Tuna I*].

[64] *See* Patricio Leyton, *Evolution of the "Necessary Test" of Article XX (b): From Thai Cigarettes to the Present*, *in* RECONCILING TRADE AND ENVIRONMENT 81 (Edith Brown-Weiss & John H. Jackson eds., 2001).

[65] *See generally* Weiss & Jackson, *supra* note 5, at 163-65; Hansen, *Transparency*, *supra* note 7, at 1048; Lewis Briggs, *Conserving "Exhaustible Natural Resources": The Role of Precedent in the GATT Article XX(g) Exception*, *in* RECONCILING TRADE AND ENVIRONMENT 261 (Edith Brown-Weiss & John H. Jackson eds., 2001). *See also* Kenichiro Urakami, *Unsolved Problems and Implications for the Chapeau of GATT Article XX after the Reformulated Gasoline Case*, *in* RECONCILING TRADE AND ENVIRONMENT 167 (Edith Brown-Weiss & John H. Jackson eds., 2001) (discussing interpretative problems raised in the *Gasoline* case and limitations of the chapeau); Christopher John Duncan, *Reconciling US Regulatory Procedure with the WTO Reformulated Gasoline Decision*, *in* RECONCILING TRADE AND ENVIRONMENT 185 (Edith Brown-Weiss & John H. Jackson eds., 2001) (arguing that the US will have a better chance of prevailing in WTO DSB decisions if it increases regulatory procedures that take into account the international interests noted by the Appellate Body in the *Gasoline* Case); Victoria H. Imperiale, *Characterizing Air as an Exhaustible Natural Resource*, *in* RECONCILING TRADE AND ENVIRONMENT 243 (Edith Brown-Weiss & John H. Jackson eds., 2001) (examining the origins of the term "exhaustible natural resources" within Article XX(g) of GATT 1994).

In a 1990 amendment to the Clean Air Act, the United States Congress instructed the Environmental Protection Agency (EPA) to issue regulations on the composition and emissions effects of gasoline in order to improve air quality in the most polluted areas of the country by reducing vehicle emissions of toxic air pollutants and ozone-forming volatile organic compounds.[66] United States refiners, blenders, and importers would be subject to the new regulations. The amendment divided the United States market for sale of gasoline into two parts.[67] The first part was comprised of areas that experienced serious ozone pollution problems. In these areas, only reformulated gasoline could be sold to consumers. The second part of the market consisted of less polluted areas, where conventional gasoline could be sold to consumers. Certain compositional and performance specifications for reformulated and conventional gasoline were set by the 1990 amendment to the CAA. Reformulated gasoline was required to have a 15 percent reduction in the emissions of both volatile organic compounds ("VOCs") and toxic air pollutants ("toxics") and no increase in emissions of nitrogen oxides ("NOx").[68] With regard to conventional gasoline, the new regulation established that no refiner, blender or importer of gasoline could sell conventional gasoline that emits VOCs, toxics, NOx or carbon monoxide ("pollutants") in greater amounts than the gasoline sold in the United States in 1990.[69] These determinations distinguished between two types of baselines to assess gasoline quality: *individual baselines*, which represent the quality of gasoline

[66] *US – Reformulated Gasoline*, *supra* note 47, P 2.1.
[67] *Id.* P 2.2.
[68] *Id.* P 2.3.
[69] *Id.* P 2.4.

produced by a specific refiner, and a *statutory baseline* that reflects average US 1990 gasoline quality.[70] In EPA's final 1994 Proposal Regulation, domestic refiners in operation for at least six months in 1990 had the option of using one of three methods to determine their baseline, including an individual baseline. Other domestic or foreign refiners did not have these same choices of methods under the new regulation. In some cases, the individual baselines were more advantageous than the statutory baseline.

Venezuela and Brazil brought a claim to the WTO, alleging that the US regulation violated Articles I:1 (General Most-Favored-Nation Treatment),[71] III:1 and III:4 (National Treatment on Internal Taxation and Regulation), Articles 2.1 and 2.2 of the Agreement on Technical Barriers to Trade (TBT), relating to the preparation, adoption and application of technical regulations, and nullification and impairment of benefits.

The Panel held that the gasoline regulations were inconsistent with Article III:4 GATT, which requires that imported like products must be treated no less favorably than like domestic products with respect to laws and regulations.[72] Moreover, the Panel concluded the US measures were not justified under the exception of Article XX(g) of

[70] *Id.* P 2.3.
[71] The Most-Favored-Nation (MFN) obligation requires any advantage, favor, privilege or immunity granted to an imported product from any country to be accorded immediately and unconditionally to the "like product" imported from other WTO members. The general scope of the MFN obligation was discussed by the Appellate Body in European Communities – Regime for The Importation, Sale and Distribution of Bananas, WT/DS27/AB/R, adopted by the DSB on September 25, 1997.
[72] *US – Reformulated Gasoline*, *supra* note 43, P 8.1.

GATT 1994, as a measure relating to the conservation of exhaustible natural resources.[73] First, the Panel noted that a policy to reduce the depletion of clean air was a policy to conserve a natural resource within the meaning of Article XX(g).[74] Second, the Panel addressed the issue of whether, within the scope of Article XX(g), the United States baseline establishment levels were "related to" the conservation of clean air and made effective "in conjunction" with restrictions on domestic production or consumption. In the Panel's opinion, following previous GATT jurisprudence,[75] the term "relates to" means that a measure be "primarily aimed at" the conservation of an exhaustible natural resource.[76] In the present case, the Panel saw no direct connection between less favorable treatment of imported gasoline that was chemically identical to domestic gasoline and the US objective of improving air quality in the United States.[77] Therefore, the Panel concluded that the United States establishment methods do not relate to the conservation of an exhaustible natural resource under Article XX(g) of the GATT 1994. Because the Panel identified this inconsistency, it did not have to examine whether the measure was taken "in conjunction" with restrictions on domestic production or consumption or whether the measure met the conditions of the chapeau of Article XX.[78]

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[73] *Id.*
[74] *Id.* P 6.37.
[75] GATT Panel Report, *Canada – Measures Affecting Exports of Unprocessed Herring and Salmon*, L/6268, (adopted March 22,1988), GATT B.I.S.D. 35S/98.
[76] *US – Gasoline*, *supra* note 43, P 6.39.
[77] *Id.* P 6.40.
[78] *Id.* P 6.41.

The Appellate Body reversed the Panel's findings that the measures did not fall within the scope of Article XX(g),[79] ruling that the measures fall under the exception of Article XX(g), but failed to meet the requirements of the chapeau of Article XX. The chapeau provides that a measure may not be applied in a manner that would constitute either a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail or a disguised restriction on international trade.[80] The Appellate Body departed from the Panel's finding that the baseline rules were not regarded as "primarily aimed at" the conservation of natural resources for the purposes of Article XX(g):

> The baseline establishment rules, taken as a whole (…) need to be related to the 'non-degradation' requirements set out elsewhere in the Gasoline Rule. Those provisions can scarcely be understood (…) totally divorced from other sections of the Gasoline Rule which certainly constitute part of the context of these provisions. The baseline establishment rules whether individual or statutory, were designed to permit scrutiny and monitoring of the level of compliance of refiners, importers and blenders with the 'non-degradation' requirements. Without baselines of some kind, such scrutiny would not be possible and the Gasoline Rule's objective of stabilizing and preventing further deterioration of the level of air pollution prevailing in 1990, would be substantially frustrated. The relationship between the baseline establishment rules and the 'non-degradation' requirements of the Gasoline Rule is not negated by the inconsistency, found by the Panel, of the baseline establishment rules with the terms of Article III:4. We consider that, given that substantial relationship, the baseline establishment rules cannot be regarded as merely incidentally or inadvertently aimed at the conservation of clean air in the United States for the purposes of Article XX(g).[81]

[79] *See US – Reformulated Gasoline* Appeal, *supra* note 43, at 633.
[80] *Id.*
[81] *Id.* at 623.

The Appellate Body also examined whether the baseline establishment rules "are made effective in conjunction with restrictions on domestic production or consumption." The Appellate Panel initially noted that it interpreted the second clause of Article XX(g) – "if such measures are made effective in conjunction with restrictions on domestic production or consumption" – to be read as a requirement that the measures concerned impose restrictions not only in respect to imported gasoline, but also with respect to domestic gasoline.[82] In other words, the clause is a requirement of even-handedness in the treatment of imported and domestic goods. The Appellate Body noted that clean air restrictions regulating the domestic production of "dirty gasoline" are established jointly with corresponding restrictions regarding imported gasoline. Provided that Article XX(g) is not concerned with equal treatment between imported and domestic goods, the fact that imported gasoline receives less favorable treatment than its domestic counterpart does not detract from the Appellate Body's conclusion that the US measure is made effective in conjunction with restrictions on domestic production or consumption.[83]

Having concluded that the baseline establishment rules of the Gasoline Rule fall within the terms of Article XX(g), the Appellate Panel moved to the last part of the Article XX analysis of whether those rules also meet the requirements of the chapeau of Article XX. In other words, the Appellate Body faced the difficult question of whether the application of the measure was conducted in a manner that constituted *arbitrary* or

[82] *Id.* at 624.
[83] *Id.* at 625.

unjustifiable discrimination where the same conditions prevail, or a *disguised restriction on international trade*. In the Appellate Body's opinion, arbitrary discrimination, unjustifiable discrimination and disguised restriction on international trade impart meaning to one another and should be read together:[84]

> It is clear to us that 'disguised restriction' includes disguised discrimination on international trade. It is equally clear that concealed or unannounced restriction or discrimination in international trade does not exhaust the meaning of 'disguised restriction.' We consider that 'disguised restriction', whatever else it covers, may properly be read as embracing restrictions amounting to arbitrary or unjustifiable discrimination in international trade taken under the guise of a measure formally within the terms of an exception listed in Article XX.[85]

In examining the manner in which the measure was applied, the Appellate Body noted that the United States had failed to pursue the possibility of entering into cooperative arrangements with the governments of Venezuela and Brazil.[86] In addition the Appellate Body noted that the United States failed to take into account the costs to the foreign refiners, which results from the imposition of the statutory baselines.[87] Based on these two omissions, the Appellate Body concluded that the United States applied the measure in a manner that constitutes unjustifiable discrimination and a disguised restriction on international trade.[88]

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[84] *See US – Reformulated Gasoline* Appeal, *supra* note 43, at 629.
[85] *Id*.
[86] *Id.* at 631.
[87] *Id*. at 632.
[88] *Id*. at 633.

c. The *Beef Hormones* Case[89]

The use of growth-promoting hormones to treat cattle in the United States and in certain parts of Europe dates back at the 1950s.[90] However, in the 1980s, the European Communities prohibited the sale of meat and meat products containing growth-stimulating hormones, which had a negative impact on the American and Canadian export market to the EC.[91] This import prohibition was present in a series of Directives.[92] Effective 1 July 1997, two of these Directives were repealed and replaced by a new Directive,[93] which maintained the prohibition of the administration to farm animals of substances having a hormonal or thyrostatic action.

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[89] *See* Weiss & Jackson, *supra* note 8, at 299-301. *See also* Charles F. De Jager, *The European Union's Position on Agriculture After the WTO Appellate Body's Decision in Beef Hormones*, *in* RECONCILING TRADE AND ENVIRONMENT 303 (Edith Brown-Weiss & John H. Jackson eds., 2001) (exploring the links between the Appellate Body's decision in the *Beef Hormones* case and the European Union's negotiating position on agriculture). *See also* Andrew T. Guzman, *WTO Dispute Resolution in Health and Safety Cases*, *UC Berkeley Public Law Research Paper No. 989371*, *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=989371 (last visited Sep. 3, 2007) (arguing that the DSB should apply a more deferential standard of review when evaluating health and safety cases).

[90] *See* Weiss & Jackson, *supra* note 5, at 299.

[91] *See id.*

[92] Council Directive 81/602/EEC of 31 July 1981 Concerning the Prohibition on Certain Substances Having Hormonal Action and of any Substances Having Thyrostatic Action, 1981 O.J. (L 222) 32 (prohibiting the administration to farm animals substances having a hormonal action and substances having a thyrostatic action; prohibiting the placing on the European market both domestically produced and imported meat products derived from farm animals to which such substances had been administered); Council Directive 88/146/EEC of 7 March 1988 Prohibiting the Use in Livestock Farming of Certain Substances Having a Hormonal Action, 1988 O.J. (L 70) 16 (prohibiting both the intra-EEC trade and the importation from third countries of meat and meat products obtained from animals to which substances having oestrogenic, androgenic, gestagenic or thyrostatic action had been administered); Council Directive 88/299/EEC of 17 May 1988, 1988 O.J. (L 128) 36 (establishing certain conditions under which trade in meat and meat products derived from animals treated substances for therapeutic or zootechnical purposes was allowed).

[93] Council Directive 96/22/EC, 1996 O.J. (L 125) 3 (prohibiting the use in livestock farming of certain substances having a hormonal action).

In 1996, the United States and Canada separately challenged the European measure based on the Sanitary and Phytosanitary Agreement [hereinafter SPS Agreement]. The SPS Agreement, as an application of Article XX (b) of the GATT 1994, is considered "special law" (*lex specialis*) with regard to measures necessary to protect human, animal, or plant life and health.[94] It was negotiated in order to avoid member states' abuse of Article XX(b) in agricultural matters, assuring that rules regarding the protection of life and health do not create technical obstacles to international trade.[95]

The Agreement permits countries to take food and safety measures, provided several conditions are met; for example, an SPS measure must be based on sufficient scientific evidence (Article 2.2) and risk assessment (Article 5.1). While the SPS Agreement encourages harmonization of SPS measures (Article 3.1), it allows the maintenance of measures resulting in a higher level of protection than would be achieved by international standards (Article 3.3).

On 20 May 1996, the Dispute Settlement Body (DSB) established a WTO Panel to examine the consistency of the EC measure with GATT rules.[96] The United States argued that the EC measure that restricts or prohibits the importation of meat and meat products from the US violated Article III (requiring national treatment) and XI of GATT

[94] *See* Sandrine Maljean-Dubois, DROIT DE L'ORGANISATION MONDIALE DU COMMERCE ET PROTECTION DE L'ENVIRONNEMENT [WORLD TRADE ORGANIZATION LAW AND ENVIRONMENTAL PROTECTION] 56 (Sandrine Maljean-Dubois ed., 2003).
[95] *Id.*
[96] *See EC – Hormones*, *supra* note 44.

1994 (prohibiting quantitative restrictions); Articles 2, 3, and 5 of the SPS Agreement; Article 2 of the Agreement on Technical Barriers to Trade (on the preparation, adoption and application of technical regulations); and Article 4 of the Agreement on Agriculture (on market access commitments). On 16 October 1996, the DSB established another WTO Panel to analyze a complaint brought by Canada against the EC on similar grounds as the one brought by the United States.[97] The composition of both panels was identical.

The Panel circulated its Reports to the Members of the WTO on 18 August 1997, recommending that the DSB requests the European Communities to bring its measures into conformity with its obligations under the SPS Agreement.[98]

The Panels concluded that the European Communities had breached several obligations assumed under the Agreement on the Application of Sanitary and Phytosanitary Measures.[99] First, by maintaining sanitary measures that were not based on a risk assessment, the European Communities acted inconsistently with the requirements contained in Article 5.1.[100] Second, by adopting arbitrary or unjustifiable distinctions in the levels of sanitary protection it considers to be appropriate in different situations which result in discrimination or a disguised restriction on international trade, the European Communities acted inconsistently with the requirements contained in Article 5.5 of the

[97] *Id.*
[98] *Id.* P 9.2.
[99] *Id.* P 9.1.
[100] *Id.* P 9.1(i).

SPS Agreement.[101] Third, the Panel concluded that the European Communities acted inconsistently with Article 3.1 of that Agreement by enforcing unjustified sanitary measures different from existing international standards under Article 3.3 of the Agreement.[102] The Appellate Body confirmed the Panel's first findings in both disputes – that the European Communities' import ban was inconsistent with Article 5.1 (requiring risk assessment) – but reversed the others.[103]

2) Unilateral National Measures to Protect the Environment outside National Jurisdiction[104]

The main characteristic of this type of measure is that a national measure is implemented which is not pursuant to an international or multilateral agreement.[105] For example, a country may not want to watch helplessly as an endangered species is forced into extinction by international fishing methods that destroy the animals as by-catch. Such a dilemma warrants a clash between environment and trade interests.[106] Principle 12 of the 1992 Rio Declaration on Environment and Development recommended avoidance of unilateral national measures aimed at protecting the environment outside national

[101] *See EC – Hormones*, *supra* note 44, P 9.1(ii).
[102] *Id.* P 9.1(iii).
[103] *See EC – Hormones* Appeal, *supra* note 44.
[104] *See generally* Hansen, *Transparency*, *supra* note 200 (arguing that environment and trade disputes may be reduced if governments adopt more transparent decision-making procedures). *See also* Richard W. Parker, *The Use and Abuse of Trade Leverage to Protect the Global Commons: What Can We Learn from The Tuna-Dolphin Conflict*, 12 GEO. INT'L ENVTL. L. REV. 1 (1999) (concluding that there are more pros than cons in the use of environmental trade leverage).
[105] *See* Weiss & Jackson, *supra* note 5, at 29.
[106] *Id.*

jurisdiction.[107] This type of conflict between environment and trade is evident in the *Tuna-Dolphin I*,[108] *Tuna Dolphin-II*,[109] and *Shrimp-Turtle* cases.[110]

a. The Tuna-Dolphin I Case

On 5 November 1990, Mexico requested consultations with the United States regarding restrictions on imports of tuna.[111] On 6 February 1991, the GATT Council agreed to establish an arbitration panel, which submitted its conclusions to the parties on August 16 1991.[112] The dispute between Mexico and the United States arose from an American embargo against imports of yellowfin tuna or yellowfin tuna products from Mexico caught using methods ("purse-seine") that kill or harm Eastern spinner dolphins.[113]

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[107] Principle 12: … "Unilateral actions to deal with environmental challenges outside the jurisdiction of the importing country should be avoided. Environmental measures addressing Transboundary or global environmental problems should, as far as possible, be based on an international consensus."
[108] *US – Tuna I*, *supra* note 256, at 155.
[109] United States – Restrictions on Imports of Tuna, June 1994, *reprinted in* 33 I.L.M. 839 [hereinafter *US – Tuna II*].
[110] Panel Report, United States – Import Prohibition of Certain Shrimp and Shrimp Products, May 1998, *reprinted in* 37 I.L.M. 832 (1998) [hereinafter *US – Shrimp*]; Appellate Body Report, United States – Import Prohibition of Certain Shrimp and Shrimp Products, WT/DS58/AB/R (Oct. 12, 1998) [hereinafter *US – Shrimp* Appeal].
[111] *US – Tuna I*, *supra* note 63, P 1.1.
[112] *Id.* P 1.3.
[113] On October 10, 1990, the United States Government imposed an embargo, pursuant to a court order, on imports of commercial yellowfin tuna and yellowfin tuna products harvested with "purse-seine" nets in the Eastern Tropical Pacific Ocean (ETP) from Mexico. The embargo was conditioned on Mexico's showing that the "percentage of Easter spinner dolphins killed by the Mexican fleet over the course of an entire fishing season did not exceed 15 per cent of dolphins killed by it in that period." *Id.* P 5.2.

The harvesting of tuna in the United States is regulated by the Marine Mammal Protection Act (MMPA). The MMPA requires that fishermen conducting their activities in American jurisdiction use certain fishing techniques that reduce incidental harm to dolphins while harvesting fish.[114] Moreover, the MMPA bans the importation of fish (or products of such fish) caught with commercial fishing technology resulting in the incidental death or injury of ocean mammals in excess of United States standards.[115]

Before the GATT Panel, Mexico argued that the US embargo violated several provisions of the General Agreement, namely Article XI [General Elimination of Quantitative Restrictions], Article XIII [Non-discriminatory Administration of Quantitative Restrictions], Article III [National Treatment of Internal Taxation and Regulations], Article IX [Marks of Origin] and Article I [General Most-Favored-Nation Treatment].[116]

The United States responded that the challenged measures fell within the General Exceptions of Article XX of the General Agreement, namely parts (b) (measures necessary to protect human, animal or plant life or health), (d) (measures necessary to secure compliance with laws or regulations which are not inconsistent with the General

[114] The MMPA applies to all persons and vessels subject to United States jurisdiction, on the high seas and in the United Sates territory, including the territorial sea of the United Sates and the United States Exclusive Economic Zone. *See id*. P 2.4.
[115] *Id*. P 5.2.
[116] *US – Tuna I*, *supra* note 63, PP 3.1-3.5.

Agreement), and (g) (measures relating to the conservation of exhaustible natural resources).[117]

The Panel concluded that the United States direct prohibition on certain yellowfin tuna and certain yellowfin tuna products of Mexico directly imported from Mexico, and the provisions of the MMPA under which it is imposed could not be justified under the exceptions in Article XX(b) and (g) of the General Agreement.[118]

First, concerning Article XX(b), the Panel noted that the main issue under consideration was whether this provision covers measures necessary to protect human, animal or plant life or health outside the jurisdiction of the contracting party taking the measure.[119] Because the provision refers to life and health generally, without express limitation of the jurisdiction of the contracting party imposing the measure, the Panel decided to look at the legislative history of Article XX(b) and concluded that the concerns of the drafters focused on the use of sanitary measures to safeguard life or health of humans, animals or plants within the jurisdiction of the importing countries.[120]

The Panel recalled Thailand's Restrictions on Importation of and Internal Taxes on Cigarettes, which stated that letter b of Article XX was intended to allow contracting

[117] *Id.* PP 3.6-3.9.
[118] *See id.* PP 5.29, 5.34.
[119] *Id.* P 5.25.
[120] *Id.* P 5.26.

parties to impose trade restrictive measures inconsistent with the General Agreement to pursue overriding public policy goals, at least to the extent that such inconsistencies were unavoidable.[121] But, as the Panel concluded, the United States had not demonstrated that it had exhausted all options reasonably available to it to pursue its dolphin protection objectives through measures consistent with the General Agreement, in particular through negotiation of international cooperative arrangements.[122] Furthermore, the Panel noted that even if there were no alternative measures available to the United States, the challenged measures could still not be considered necessary within the meaning of Article XX(b) due to the unpredictable conditions set by the United States for Mexico to comply with.[123]

With relation to Article XX(g), the Panel noted that measures relating to the conservation of exhaustible natural resources be taken "in conjunction with restrictions on domestic production or consumption," which has been interpreted to mean that the measure "was primarily aimed at rendering effective these restrictions."[124] Because Mexico's maximum incidental dolphin-taking rate were set by the United States at unpredictable terms, the Panel concluded the US measures were not primarily aimed at conserving exhaustible natural resources (dolphins).[125] Moreover, the Panel concluded

[121] *US – Tuna I*, *supra* note 63, P 5.27. *See also Thailand – Cigarettes*, *supra* note 42, PP 73-74.
[122] *US – Tuna I*, *supra* note 63, P 5.28.
[123] *Id.*
[124] *Id.* P 5.31 n.43. *See also* Canada – Measures Affecting Exports of Unprocessed Herring and Salmon, 114, P 4.6, (adopted March 22,1988), B.I.S.D. 35S/98.
[125] *US – Tuna I*, *supra* note 63, P 5.33.

that the effective control of the production or consumption of an exhaustible natural resource is limited to the jurisdiction of the country imposing the restrictions.[126]

b. The Tuna-Dolphin II Case

This dispute arose out of the European Economic Commission (EEC) complaint that the US restrictions affecting indirect imports of tuna were inconsistent with the General Agreement. Section 101(a)(2)(c) of the MMPA provides that any nation ("intermediary nation") that exports yellowfin tuna or yellowfin tuna products to the United States and that imports yellowfin tuna or yellowfin tuna products that are subject to a direct prohibition on import into the United States must certify and provide reasonable proof that it has not imported products subject to the direct prohibition within the preceding six months.

The EEC argued that the import prohibitions on tuna and tuna products imposed pursuant to Section 101(a)(2)(c) of the MMPA were contrary to Articles XI [General Elimination of Quantitative Restrictions] and III [National Treatment on Internal Taxation and Regulation], not justified by Article XX [General Exceptions] of the General Agreement.[127] The United States contended that the import prohibition on tuna

[126] *Id.* P 5.31.
[127] *US – Tuna II*, supra note 109, P 3.1.

and tuna products imposed pursuant the MMPA was consistent with the GATT, since it came within the scope of letters (g), (b), and (d) of Article XX.[128]

The Panel suggested the adoption of a three-prong test in order to determine whether the challenged measure falls under Article XX(g) exception.[129] First, one must determine whether the policy in respect of which these provisions are invoked fall within the range of policies to conserve exhaustible natural resources. Second, one must decide whether the measure for which the exception is being invoked is "related to" the conservation of exhaustible natural resources, and whether it is made effective "in conjunction" with restrictions on domestic production or consumption. Third, one must determine whether the measure is applied in conformity with the requirement set out in the preamble to Article XX, namely that "measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade."

In the *Tuna-Dolphin II* case, the Panel noted that dolphin stocks could potentially be exhausted, regardless of the fact that they were not depleted at the time. Thus, a policy to conserve dolphins fell within the range of policies to conserve exhaustible natural resources.[130] Moreover, while the Panel in *Tuna-Dolphin I* rejected the US arguments for

[128] *See id.* P 3.2.
[129] *Id.* P 5.12.
[130] *See id.* P 5.13.

extraterritorial application of the Article XX (b) and (g) exceptions,[131] this Panel allowed for the possibility of extraterritorial application of Article XX (g),[132] stating that it could see no valid reason supporting a conclusion otherwise.[133]

The Panel also considered whether the embargo imposed by the United States on yellowfin tuna and yellowfin tuna products could be considered to be "related to" or "primarily aimed"[134] at the conservation of an exhaustible natural resource within the meaning of Article XX(g), and whether it was made effective in "conjunction with" or "primarily aimed at"[135] restriction on domestic production or consumption. The Panel concluded that the United States embargo forcing other the EEC countries to change their policies could not be primarily aimed at the conservation of an exhaustible natural resource or at rendering effective restrictions on domestic production or consumption.[136] The Panel noted that the ban on imports of tuna into the United States taken under the intermediary nation embargo could not, by itself, further US conservation objectives.[137] According to the Panel, the only way to achieve the objective of conserving exhaustible natural resources was through changes in policy of the tuna-exporting countries, and not

[131] Patricia Isela Hansen, *The Impact of the WTO and NAFTA on US Law*, 46 J. OF LEGAL EDUC., 569, 576 (1996).
[132] *See* Hansen, *Transparency*, *supra* note 7, at 1027, 1031.
[133] *US – Tuna II*, *supra* note 304, P 5.20.
[134] Report of the Panel in Canada – Measures affecting the exports of unprocessed herring and salmon, 35S/98,114, P 4.6 (adopted March 22,1988).
[135] *See id.*
[136] *US – Tuna II*, *supra* note 109, P 5.27.
[137] *Id.* P 5.23.

in those of the intermediary country exporting tuna to the United States.[138] Finally, because the United States failed to meet the second prong of the test, the Panel did not advance the analysis of whether the measure is applied in conformity with the requirement set out in the preamble to Article XX.[139]

In order to determine whether the United States intermediary embargo was consistent with Article XX(b) of the General Agreement, the Panel followed a three-prong test similar to the one used in determining whether a measure is consistent with Article XX(g).[140] Namely, the Panel determined whether the United States measures fall within the range of policies to protect human, animal, or plant life or health. Then the Panel determined whether the measure that was inconsistent with the General Agreement was "necessary" to protect human, animal, or plant life or health. Finally, the Panel decided whether the measure was applied in a manner consistent with the requirement set out in the preamble to Article XX.

The Panel answered the first prong in the affirmative, regardless of the fact that the measures were taken pursuant living things located outside the territorial jurisdiction of the country imposing them.[141] Secondly, the Panel found that the intermediary embargo, taken so as to force other countries to change their environmental policies and

[138] *Id.*
[139] *Id.* P 5.27.
[140] *Id.* P 5.29.
[141] *US – Tuna II*, *supra* note 109, P 5.30-5.33.

that were effective only if such changes occurred, could not be considered "necessary" for the protection of animal life and health within the meaning of Article XX(b) of the General Agreement.[142] The Panel determined that the term "necessary" in Article XX(b) means that no other consistent measures are reasonably available to fulfill the policy objective.[143] Accordingly, the Panel did not advance the third prong of the test, namely whether the measure is applied in conformity with the requirement set out in the preamble to Article XX.

c. The *Shrimp-Turtle* Case[144]

In the *Shrimp-Turtle* case, the WTO Appellate Body concluded that a US prohibition on shrimp harvested by methods that are harmful to sea turtles was unjustifiable and arbitrary, regardless of the fact that the US banned the use of such methods by its own shrimp fleet, and that the sea turtles species protected by the prohibition were recognized to be in danger of extinction. The WTO revisited the dispute in 2001.[145]

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[142] *Id.* P 5.39.
[143] *See id.* P 5.35.
[144] *See generally* Weiss & Jackson, *supra* note 5, at 409-411. *See also* Hansen, *Transparency*, *supra* note 7.
[145] Panel Report, *United States – Import Prohibition of Certain Shrimp and Shrimp Products – Recourse to Article 21.5 of the DSU by Malaysia*, WT/DS58/RW (adopted November 2001), upheld by Appellate Body Report, WT/DS58/AB/RW, DSR 2001:XIII, 6529; Appellate Body Report, *United States – Import Prohibition of Certain Shrimp and Shrimp Products – Recourse to Article 21.5 of the DSU by Malaysia*, WT/DS58/AB/RW, DSR 2001:XIII, 6481(adopted November 21, 2001). *See* Howard F. Chang, *Environmental Trade Measures, The Shrimp-Turtle Rulings, and The Ordinary Meaning of the Text of the GATT*, 8 CHAP. L. REV. 25 (2005) (arguing that the 2001 ruling by the Appellate Body confirms the

India, Malaysia, Pakistan and Thailand requested the establishment of a WTO Panel to examine the GATT-consistency of a United States ban imposed upon importation of certain shrimp and shrimp products under Section 609 of US Public Law 101-162 and the "Revised Notice of Guidelines for Determining Comparability of Foreign Programs for the Protection of Turtles in Shrimp Trawl Fishing Operations."[146] Section 609 provides that shrimp harvested with technology that may adversely affect certain sea turtles may not be imported into the United States, unless the President certifies to Congress annually that the harvesting nation has a regulatory program and an incidental take rate comparable to that of the United States, or that the particular fishing environment of the harvesting nation does not pose a threat to sea turtles.[147] The Revised guidelines for assessing the comparability of foreign regulatory programs with the US program provides that the latter needs to contain a commitment to require all shrimp trawl vessels to use turtle excluder devices (TEDs)[148] at all times (or reduce tow times for vessels under 25 feet), or, alternatively, a commitment to engage in a statistically reliable scientific program to reduce the mortality of sea turtles associated with shrimp fishing.[149]

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interpretation of the 1998 *Shrimp-Turtle* decision, which preserves broad leeway for the use of environmental trade measures).

[146] *See US – Shrimp*, *supra* note 305.

[147] *Id*. P 2.7.

[148] A turtle excluder device (TED) is a "grid trapdoor installed inside a trawling net that allows shrimp to pass to the back of the net while directing sea turtles and other unintentionally caught large objects out of the net." *Id.* P 2.5.

[149] *Id.* P 2.8.

Presently, sea turtles are included in Appendix I of the 1973 Convention on International Trade in Endangered Species ("CITES"), in Appendix I and II of the 1979 Convention on Migratory Species of Wild Animals ("CMS"), appear in the IUCN Red List as endangered or vulnerable, and in the 1973 United States Endangered Species Act.[150]

India, Malaysia, Pakistan and Thailand requested the Panel to find that Section 609 of US Public Law 101-162 and its implementing measures are inconsistent with the GATT 1994 Articles XI:1, XIII:1, I:1 and not justified by the exceptions under Article XX (b) and (g) of the GATT 1994.[151] The United States, on the other hand, asked the Panel to find that Section 609 and its implementing measures fall within the scope of Article XX, paragraphs (b) and (g) of GATT 1994.[152]

The Panel recalled that, as for Article XX, the issue under analysis was "whether Article XX (b) and (g) apply at all when a Member has taken a measure conditioning access to its market for a given product on the adoption of certain conservation policies by the exporting Member(s)."[153] Contrary to GATT/WTO jurisprudence, the Panel

[150] *Id.* PP 2.3-2.4.
[151] *See US – Shrimp, supra* note 145, P 3.1.
[152] *See id.* P 3.3.
[153] *Id.* P 7.26.

decided to conduct the Article XX analysis starting by the chapeau, to, if needed, move to its paragraphs.[154]

The Panel stated that the chapeau to Article XX does not address the challenged measure or its specific contents, but rather addresses the manner in which that measure is applied.[155] Thus, the manner in which a certain measure is applied shall constitute neither a means of arbitrary or unjustifiable enforcement between countries where the same conditions prevail, nor a disguised restriction on international trade. Recalling the Appellate Body reading of the chapeau, the Panel states that "the purpose and object of the introductory clause of Article XX is generally the prevention of abuse of the exceptions [what was latter to become] Article XX."[156]

In interpreting the chapeau of Article XX as an integral part of the WTO Agreement, the Panel notes that although the Preamble of the WTO Charter acknowledges that the optimal use of the world's resources must be pursued in accordance with the objective of sustainable development, the "central focus of the [General Agreement] remains the promotion of economic development through trade."[157] Under this framework, the Panel concluded that conditioning access to a country's

[154] *Id.* P 7.28.
[155] *Id.* P 7.29.
[156] *See US – Shrimp*, *supra* note 145, P 7.29.
[157] *Id.* P 7.42.

internal market to the adoption of certain conservation processes would compromise the needed security and predictability in the multilateral trading system:[158]

> If Article XX were interpreted to permit contracting parties to deviate from the obligations of the General Agreement by taking trade measures to implement policies, including conservation policies, within their own jurisdiction, the basic objectives of the General Agreement would be maintained. If however Article XX were interpreted to permit contracting parties to take trade measures so as to force other contracting parties to change their policies within their jurisdiction, including their conservation policies, the balance of rights and obligations among contracting parties, in particular the right of access to markets, would be seriously impaired.[159]

Moreover, the Panel noted that developing internationally accepted environmental standards would constitute a legitimate way to avoid threatening the multilateral trading system with unilateral conservation measures.[160] The United States did not enter into negotiations to develop a multilateral accepted environmental policy before it imposed the import ban.[161]

Finally, the Panel concluded that, in light of the chapeau to Article XX of the GATT 1994, the manner in which the United States measures were applied was unjustifiably discriminatory.[162] Because the Panel concluded that the measure at issue does not satisfy the conditions contained in the chapeau of Article XX, the exam of

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[158] *Id.* P 7.45.
[159] *Id.* P 7.46.
[160] *Id.* P 7.61 (stating that "[g]eneral international law and international environmental law clearly favor the use of negotiated instruments rather than unilateral measures when addressing transboundary or global environmental problems….").
[161] *See US – Shrimp*, *supra* note 145, P 7.56.
[162] *Id.* P 7.49.

whether the United States measure is covered by the terms of Article XX (b) and (g) became unnecessary.[163]

In the appeal, the Appellate Body was asked to decide whether the Panel erred in finding that the measure at issue constitutes unjustifiable discrimination between countries where the same conditions prevail and, consequently, not within the scope of measures permitted under Article XX of the GATT 1994.[164]

The Appellate Body noted that the Panel failed to examine the ordinary meaning of the words of Article XX of the GATT 1994: instead of focusing on *the manner in which the measure is applied*, it analyzed *the design of the measure itself*.[165] The Appellate Body remarked that the latter is to be examined in the course of determining whether a measure falls within one of the paragraphs of Article XX. As a result, the Panel failed to look into the object and purpose of the chapeau of Article XX.[166] This misinterpretation of Article XX is attributable to the Panel's disregard of the correct steps for analyzing Article XX claims.[167] The Appellate Body, in *United States – Reformulated Gasoline*,[168] set the correct methodology for interpreting Article XX claims:

[163] *Id.* PP 7.29, 7.62.
[164] *US – Shrimp* Appeal, *supra* note 145, P 111.
[165] *Id.* P 115.
[166] *Id.* P 116.
[167] *Id.* P 117.
[168] *US – Reformulated Gasoline* Appeal, *supra* note 43.

> In order that the justifying protection of Article XX may be extended to it, the measure at issue must not only come under one or another of the particular exceptions – paragraphs (a) to (j) – listed under Article XX; it must also satisfy the requirements imposed by the opening clauses of Article XX. The analysis is, in other words, two-tiered: first, provisional justification by reason of characterization of the measure under XX(g); second, further appraisal of the same measure under the introductory clauses of Article XX.[169]

Having reversed the Panel's legal conclusion that the United States measure at issue is not within the scope of measures permitted under the chapeau of Article XX of GATT 1994, the Appellate Body undertook the two-tiered analysis, established in *United States – Reformulated Gasoline*, to determine whether Section 609 qualifies for justification under the chapeau of Article XX. Accordingly, the Appellate Body examined the consistency of Section 609 with the General Exceptions of Article XX. It proceeded to analyze whether the measure could be characterized as provisionally justified under the terms of Article XX(g) – and alternatively under Article XX(b). Because Section 609 fell under within the ambit of Article XX(g), the Appellate Body moved to the second tier of the analysis, i.e., the consistency of the manner in which the measure was applied with the terms of the chapeau of Article XX.

Paragraph (g) of Article XX covers measures "*relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption*." The Appellate Body divided the paragraph (g) analysis into three parts: whether turtles protected under Section 609 fall

[169] *Id.* p. 626.

within the definition of "exhaustible natural resources," whether the measure undertaken by the United States relates to the conservation of an exhaustible natural resource, and whether Section 609 was made effective in conjunction with restrictions on domestic production or consumption.

As for the first part of the paragraph (g) analysis, the Appellate Body concluded that "measures to conserve exhaustible natural resources, whether *living* or *non-living*, may fall within Article XX(g)."[170] Accordingly, the Appellate Panel moved to examine whether sea turtles fall within the category of exhaustible living-natural resources within the meaning of Article XX(g). The Appellate Body noted that it would be difficult to conclude that sea turtles are not exhaustible, provided that all of the seven recognized species of sea turtles are presently listed in Appendix 1 of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).[171]

Moving to the second part of the paragraph (g) analysis, the Appellate Body looked into the relationship between the measure at stake and the legitimate policy of conserving exhaustible natural resources. The Appellate Body noted that "[t]he means and ends relationship between Section 609 and the legitimate policy of conserving an exhaustible natural, and, in fact, endangered species, is observably a close and real one, a

[170] *US – Shrimp* Appeal , *supra* note 145, P 131.
[171] *Id.* P 132.

relationship that is every bit […] substantial."[172] Thus, the Appellate Body concluded that Section 609 is a measure relating to the conservation of an exhaustible natural resource under paragraph (g) of Article XX.[173]

In the third part of the paragraph (g) analysis, the Appellate Body addressed the even-handedness of the measure, that is, whether the import restrictions imposed by United States Section 609 directed at foreign shrimp are also imposed with respect to shrimp caught by the United States shrimp trawl vessels.[174] Supported by the finding that similar process requirements were imposed on domestic producers, the Appellate Body held that all three parts of the paragraph (g) analysis had been met. Thus, the Appellate Body reached the general conclusion that Section 609 is a measure "relating to" the conservation of an exhaustible natural, made effective in conjunction with restrictions on domestic production, within the meaning of Article XX(g) of the GATT 1994.[175]

Having concluded that Section 609 falls within the scope of paragraph (g) of Article XX, the Appellate Body moved to the second tier of the Article XX analysis, that is, whether the application of the United States measure, although the measure itself falls within the terms of Article XX(g), nevertheless constitutes "a means of arbitrary or

[172] *Id.* P 141.
[173] *Id.* P 142.
[174] *Id.* P 143.
[175] *US – Shrimp* Appeal , *supra* note 145, P 146.

unjustifiable discrimination between countries where the same conditions prevail" or "a disguised restriction on international trade."

As a matter of treaty interpretation, the Appellate Body notes that the express language of the chapeau requires that a measure be applied in a manner which would not constitute a means of *arbitrary or unjustifiable discrimination between countries where the same conditions prevail* or a *disguised restriction on international trade*.[176] Therefore, a measure that passes the scrutiny of Article XX's chapeau must not exhibit arbitrary discrimination where the same conditions prevail, exercise an unjustifiable discrimination between countries where the same conditions prevail, or be a disguised restriction on international trade.

The Appellate Body notes that three elements are necessary in order to render a measure applied in a manner that arbitrarily unjustifiably discriminates between countries where the same conditions prevail:[177] the application of the measure must result in discrimination, the discrimination must be arbitrary or unjustifiable in character, and discrimination must occur between countries where the same conditions prevail.

[176] *Id.* P 150.
[177] *Id.*

Having noted that the purpose of the chapeau of Article XX is the prevention of abuse of the exceptions of Article XX,[178] the Appellate Body moved on to examine whether Section 609 was applied in a manner constituting unjustifiable discrimination where the same conditions prevail.[179] The Appellate Body concluded that the manner in which the United States applied the measure amounts to unjustifiable discrimination within the scope of the chapeau of Article XX for two reasons: because "[t]he actual application of the measure … requires other WTO Members to adopt a regulatory program that is not merely comparable, but rather essentially the same, as that applied to the United States shrimp trawl vessels,"[180] and because the United States failed "to engage the appellees, as well as other [WTO] Members exporting shrimp to the United States, in serious, across-the-board negotiations with the objective of concluding bilateral or multilateral agreements for the protection and conservation of sea turtles, before enforcing the import prohibition against the shrimp exports of those other Members."[181]

Next, the Appellate Body concluded that Section 609 was applied in a manner constituting arbitrary discrimination between countries where the same conditions prevail.[182] The Appellate Body noted that the United States import measure was applied

[178] *Id.* P 151.
[179] *Id.* P 161.
[180] *US – Shrimp* Appeal , *supra* note 145, P 163.
[181] *Id.* P 166.
[182] *Id.* P 184.

with rigidity and inflexibility,[183] in denial of basic fairness, due process and transparency:[184]

> Section 609, in its application, imposes a single, rigid and unbending requirement that countries applying for certification under Section 609(b)(2)(A) and (B) adopt a comprehensive regulatory program that is essentially the same as the United States' program, without inquiring into the appropriateness of that program for the conditions prevailing in the exporting counties.[185] […] [W]ith respect to neither type of certification under Section 609(b)(2) is there a transparent, predictable certification process that is followed by the competent United States government officials […] there is no formal opportunity for an applicant country to be heard, or to respond to any arguments that may be made against it, in the course of the certification process before a decision to grant or deny certification is made […] no formal written, reasoned decision, whether of acceptance or rejection, is rendered on applications for either type of certification […] [and] [n]o procedure for review of, or appeal from, a denial of an application is provided.[186]

Having found that, under the terms of the chapeau of Article XX, the United States measure constituted arbitrary and unjustifiable discrimination between countries where the same conditions prevail, the Appellate Body concluded it was not necessary to examine whether Section 609 was applied in a manner that constitutes a disguised restriction on international trade.[187]

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[183] *Id*. P 177.
[184] *Id.* P 181.
[185] *US – Shrimp* Appeal , *supra* note 145, P 177.
[186] *Id.* P 180.
[187] *Id.* P 184.

3) Measures Taken Under Multilateral Environmental Agreements

Because the environment overlaps states territorial divisions, countries are forced to enter into international agreements to protect shared environmental resources.[188] Such agreements may include the prohibition of imports and exports of products if the importing and exporting countries are not parties to the agreement or are not complying with it.[189] In order to avoid nonmember states becoming "havens" that jeopardize the effectiveness of the agreement (free riding), these agreements should include obligations that encourage the participation of as many countries as possible.[190] The Montreal Protocol on Substances that Deplete the Ozone Layer,[191] the Convention on International Trade in Endangered Species (CITES),[192] the Basel Convention on the Transboundary Movement of Hazardous Waste,[193] and the Cartagena Protocol on Biosafety[194] are illustrative examples of multilateral environmental agreements that restrict trade in controlled items. For international trade law, the issue is "whether these agreements violate Article I (Most Favored Nation Treatment), III (National Treatment) and XI (Prohibition of Quantitative Restrictions) of GATT 1994, and if so, whether Article XX

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[188] *See* Weiss & Jackson, *supra* note 8, at 30.
[189] *Id.*
[190] *Id.* at 30-31.
[191] Montreal Protocol on Substances that Deplete the Ozone Layer, done at Montreal on 16 September 1987, *reprinted in* 26 I.L.M. 1550 (1987).
[192] Convention on International Trade in Endangered Species of Wild Fauna and Flora, done at Washington on 3 March 1973, 993 U.N.T.S. 243, 27 U.S.T. 1987, T.I.A.S.8249, *reprinted in* 12 I.L.M. 1088 (1973).
[193] Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, done on March 22, 1989, U.N. Doc. UNEP/WG.190/4, UNEP/IG.80/3 (1989), *reprinted in* 28 I.L.M. 657 (1989).
[194] The Cartagena Protocol of Biosafety to the Convention on Biological Diversity, done at Montreal on 29 January 2000, UNEP/CDB/ExCOP/1/3 (February 20, 2000), *reprinted* in 39 I.L.M. 1027 (2000).

exceptions apply to make them nonetheless GATT consistent."[195] However, WTO members have not yet brought any cases challenging the requirements of an international environmental agreement.

4) Measures Regulating Foreign Production Processes

GATT focuses on products, whereas the production process is generally accepted as falling outside the reach of the non-discriminatory principles of national treatment and most-favored-nation. However, from an environmental perspective, "[p]roducts that are produced by processes that pollute the air, water or land, or that destroy living natural resources and their habitats may be far more destructive of sustainable development than the products themselves."[196] More recent trade and environment disputes, such as the *Tuna-Dolphin I* and *II* cases and the *Shrimp-Turtle* case, indicate that this distinction is highly disputable, noting that processes can both endanger the environment and distort trade. Trade distortion happens if certain countries are allowed to work under lax environmental standards when making products that compete with those of countries complying with rigid environmental laws and regulations (in a sort of subsidy). But if these concerns are worthy of the trade community's attention, the merit of the product/process distinction is attributable to the fact that GATT closes the door to using a variety of regulatory differences to pose barriers to trade, undermining the goal of trade

[195] *See* Weiss & Jackson, *supra* note 5, at 32.
[196] *Id.*

liberalization.[197] The issue here, as Professors Brown Weiss & Jackson correctly recall, is "how to develop criteria by which to judge whether trade barriers based on processes are an appropriate accommodation of the competing trade and environment policies, or whether on the contrary the barriers are really protectionist measures in the guise of environmental (or other process) considerations."[198]

C. Summary

In this Chapter, I have shown that the assumption that trade will benefit the environment has come under serious attack by legal scholars, due to concerns that more trade and economic activity may result in more environmental degradation; that the competition brought about by free trade may put pressure on governments to lower environmental standards; and that trade agreements may prevent governments from enacting certain environmental regulations. These concerns have given rise to 4 types of trade-environment disputes. In some early cases, the approach taken by GATT panels proved so controversial that it was never adopted by the GATT parties. In subsequent cases, WTO panels have taken a different approach. They have determined that a measure is not "necessary" to protect human, animal or plant life or health (Art. XX(b)) unless there is no less-trade-restrictive alternative that would achieve the environmental/health objective. However, these measures must also satisfy the Chapeau

[197] *Id.* at 33.
[198] *See id.*

of Article XX, which requires WTO members to ensure that measures are not applied in a manner that produces "arbitrary and unjustifiable" discrimination or a "disguised" restriction on trade. WTO panels have found that the Chapeau is violated if there is a failure to enter cooperative arrangements with foreign producers; failure to take into account the costs imposed on foreign producers; or a failure to apply the measure flexibly -- taking into account the need to permit different regulatory approaches in different countries -- and fairly -- taking into account notions of due process and transparency.

Chapter II. The MERCOSUR Trade and Environment Linkage Debate

Having examined the general debate over the linkage between trade and environment, and the WTO jurisprudence in this area, I now look at the jurisprudence that has emerged with respect to trade-environment conflicts in MERCOSUR.

In 1991, Brazil, Argentina, Uruguay and Paraguay signed the Treaty of Asuncion,[199] which established a new economic block, known as *Mercado Común del Sur* [Common Market of the South] (MERSOSUR). The Treaty of Asuncion was supplemented by the Protocol of Ouro Preto, an additional protocol on the institutional structure of MERCOSUR.[200] During the 1990s, Bolivia and Chile became associated members of MERCOSUR.[201] In 2006, Venezuela became a full member of the MERCOSUR.[202]

Article 1 of the Treaty of Asuncion sets out the general objectives of MERCOSUR, including the elimination of tariff and non-tariff restrictions on imports from other MERCOSUR countries; establishment of a common external tariff in relation

[199] Treaty Establishing a Common Market between the Argentine Republic, the Federative Republic of Brazil, the Republic of Paraguay and the Eastern Republic of Uruguay (1991), 30 I.L.M. 1044 [hereinafter Treaty of Asuncion].
[200] Additional Protocol to the Treaty of Asuncion on the Institutional Structure of Mercosur (1994), 34 I.L.M. 1248 (1995).
[201] *See* Protocolo de Ushuaia sobre Compromisso Democrático no MERCOSUL, Bolívia e Chile, *available at* http://www.mercosur.int/msweb/portal%20intermediario/pt/index.htm (last visited Oct. 29, 2007).
[202] *See* Protocolo de Adesão da República Bolivariana da Venezuela ao Mercosul, *available at* http://www.mercosur.int/msweb/portal%20intermediario/pt/index.htm (last visited Oct. 29, 2007).

to third countries; and coordination and harmonization of domestic laws and regulations.[203]

This Chapter discusses MERCOSUR rules relating to environmental policies; MERCOSUR dispute settlement procedures; and MERCOSUR case law regarding trade-environment disputes. I then compare this framework to the WTO framework discussed in Chapter 1.

A. MERCOSUR Law Concerning Environmental Policies

The preamble of the Treaty of Asuncion states that the treaty's objective is "economic development with social justice."[204] However, it recognizes that this objective must be achieved in conjunction with various competing goals, including "the preservation of the environment," based on the principles of "gradualness, flexibility and balance."[205] In addition to the Asuncion Treaty, MERCOSUR countries approved an

[203] Treaty of Asuncion, *supra* note 1, art. 1. *See generally* JOSÉ ÂNGELO ESTRELLA FARIA, O MERCOSUL: PRINCÍPIOS, FINALIDADES E ALCANCE DO TRATADO DE ASSUNÇÃO[MERCOSUR: PRINCIPLES, OBJECTIVES AND REACH OF THE ASSUNÇÃO TREATY] (1993); MERCOSUL: SEUS EFEITOS JURÍDICOS, ECONÔMICOS E POLÍTICOS NOS ESTADOS-MEMBROS [MERCOSUL: ITS LEGAL, ECONOMIC AND POLITICAL EFFECTS ON THE MEMBER COUNTRIES] (Maristela Basso ed., 1997) [hereinafter MERCOSUR]; GRUPO DE REFLEXÃO PROSPECTIVA SOBRE O MERCOSUL [MERCOSUL GROUP OF PROSPECTIVE THINKING] (CLODOALDO HUGUENEY FILHO & CARLOS HENRIQUE CARDIM eds., 2003).

[204] Preamble to the Asuncion Treaty, *available at* http://www.mercosur.int/msweb/portal%20intermediario/pt/index.htm (last visited Oct. 29, 2007) ("Considerando que a ampliação das atuais dimensões de seus [Estados-Partes] mercados nacionais, através da integração, constitui condição fundamental para acelerar seus processos de desenvolvimento econômico com justiça social.").

[205] *Id.* ("Entendendo que esse objetivo deve ser alcançado mediante o aproveitamento mais eficaz dos recursos disponíveis, a preservação do meio ambiente, o melhoramento das interconexões físicas, a

Annex to the Asuncion Treaty that bans non-tariff restrictions among Member Countries. For the purposes of this Annex, the adoption measures with trade restrictive effect "destined to" protect the life and health of persons, animals and plants does not violate MERCOSUR law.[206] Such exceptions were foreseen in Article 50 of the 1980 Montevideo Treaty.

Article 50 of the 1980 Montevideo Treaty states that its trade liberalization provisions should not be interpreted to impede the adoption or implementation of measures "destined to" certain legitimate objectives, including the "protection of the life and health of persons, animals and plants."[207] This Article is the MERCOSUR equivalent of GATT Article XX. However, the MERCOSUR and GATT provisions differ in at least three significant ways. First, GATT Article XX applies only to measures that are "necessary" to protect life and health, while Article 50(d) applies to measures that are "destined to" these goals. Second, GATT Article XX contains a separate exception for measures "related to" environmental conservation, while Article 50(d) contains no similar provision. Finally, GATT Article XX includes a "chapeau" providing that the exception does not apply to measures that are applied in a manner that

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coordenação de políticas macroeconômicas da complementação dos diferentes setores da economia, com base nos princípios de gradualidade, flexibilidade e equilíbrio.").

[206] *See* Annex I to the Asuncion Treaty – Programa de Liberalização Comercial, Article 2(b), *available at* http://www.interlegis.gov.br/processo_legislativo/copy_of_20020319150524/20030529151030/TRTASS02.HTM#E49E2 (last visited Oct. 29, 2007) ("Não estão compreendidas no mencionado conceito as medidas adotadas em virtude das situações previstas no Artigo 50 do Tratado de Montevidéu de 1980").

[207] *Id.* Article 50(d) ("Nenhuma disposição do presente Tratado será interpretada como impedimento à adoção e ao cumprimento de medidas destinadas à * * * proteção da vida e saúde das pessoas, dos animais e dos vegetais").

constitutes "arbitrary or unjustifiable discrimination" or a "disguised restriction on international trade." An equivalent to the *chapeau* of Article XX of GATT 1994 does not exist in the MERCOSUR context, which means that trade tribunals are under no constraint to analyze the manner in which the measure is applied.

Unlike the WTO, MERCOSUR has also produced a number of legal instruments that directly address environmental policy. In 1992, the Presidents of the MERCOSUR countries signed the Canela Declaration, which stressed shared responsibility for environmental problems.[208] That same year, the MERCOSUR countries approved a Cooperation Agreement on Environmental Issues which establishes a Commission on Environmental Cooperation to harmonize environmental laws and regulations, and to create programs to monitor regional environmental quality.[209]

In 1994, the MERCOSUR countries signed the Protocol of Ouro Preto, which establishes a Common Market Council (CMC) and a Common Market Group (GMC). The CMC is the highest political organ in MERCOSUR. It consists of the Ministers for Foreign Affairs and the Economy and the Heads of State, and has the power to issue Decisions, which are legally binding on Member States.[210] The GMC is comprised of four permanent and four alternate members, composed of representatives of the Ministry

[208] *See* Declaração de Canela dos Presidentes dos Países do Cone Sul Prévia à Conferência das Nações Unidos sobre Meio Ambiente e Desenvolvimento, *available at* http://www.mercosur.int/msweb/portal%20intermediario/pt/index.htm (last visited Oct. 30, 2007).
[209] Decreto Presidencial No. 2.241, de 2 de junho de 1997, D.O.U. de 03.06.1997 (Brazil), art. 4.
[210] Ouro Preto Protocol, art. 3, 9, *available at* http://www.mercosur.int/msweb/portal%20intermediario/pt/index.htm (last visited Oct. 30, 2007).

of Foreign Affairs, Ministry of Economics, and representatives of each central bank.[211] The GMC has the power to issue Resolutions, which are legally binding on Member States.[212] The GMC also runs working groups, ad hoc groups and specialized meetings concerning agricultural matters, the harmonization of technical product norms, the environment, financial services, border control, and tourism.[213]

During 1993 and 1994, the GMC called a number of Reuniãos Especializadas em Meio Ambiente (Specialized Meetings on the Environment) ["REMAs"] to analyze environmental laws and regulations in place in each of the MERCOSUR Member States and propose specific environmental policies.[214] REMA I took place in Montevideo in 1993, and established the rules of procedure for future REMA meetings. The next four REMAs produced a number of recommendations, including the creation of consultation proceedings for activities conducted in one Member Country with potential transboundary effects on the others.[215] After five meetings, the REMAs were discontinued and a permanent MERCOSUR working group, Subgrupo de Trabalho 6 ["SGT-6"] was set up to promote sustainable development and the preservation of the

[211] *Id*. Art. 11.
[212] *Id*. Art. 15.
[213] *Id*. Art. 14.
[214] *See* MERCOSUL: SEUS EFEITOS JURÍDICOS, ECONÔMICOS E POLÍTICOS NOS ESTADOS-MEMBROS [MERCOSUL: ITS LEGAL, ECONOMIC AND POLITICAL EFFECTS ON THE MEMBER COUNTRIES] 405 (Maristela Basso ed., 1997) [hereinafter MERCOSUR] (arguing that the elimination of non-tariff barriers will only be achieved in MERCOSUR through harmonization of environmental laws and regulations).
[215] *Id*. at 407-08. Professor Basso argued that although the REMAs have not produced relevant concrete results, they have highlighted the need for coordinated action to protect the environment in the region. *Id*. at 408.

environment and to formulate policies that guarantee the integrity of the environment within the process of liberalizing trade.[216]

Partly as a result of the REMAs, the GMC adopted a number of resolutions referring explicitly to the objective of sustainable development and the importance of environmental protection. For example, it has adopted a resolution requiring member states to abide by gas emission control regulations;[217] a resolution proposing regulatory harmonization for recipients used to trade food within the region for environmental purposes;[218] a resolution adopting a Conduct Code for the introduction and liberation of biological-controlled agents for the environment;[219] a resolution approving guidelines for MERCOSUR energy policy including completion of environmental impact assessment studies;[220] a resolution approving Basic Guidelines on Environmental Policies produced

[216] André de Carvalho Ramos, *Restrições Ambientais ao Livre-comércio e as Decisões Arbitrais no Mercosul* [*Environmental Restrictions to Free Trade and the Mercosul Arbitral Awards*], 45 REVISTA DE DIREITO AMBIENTAL 35 (2007).
[217] GMC Resolution 9/91, *available at* http://www.mercosur.int/msweb/portal%20intermediario/pt/index.htm (last visited Oct. 30, 2007).
[218] GMC Resolution 10/91, *available at* http://www.mercosur.int/msweb/portal%20intermediario/pt/index.htm (last visited Oct. 30, 2007).
[219] GMC Resolution 53/93, *available at* http://www.mercosur.int/msweb/portal%20intermediario/pt/index.htm. *See* Basso, *supra* note 398, at 414.
[220] GMC Resolution 57/93, *available at* http://www.mercosur.int/msweb/portal%20intermediario/pt/index.htm (last visited Oct. 30, 2007).

by REMA;[221] and a resolution establishing technical regulations on automotive emissions.[222]

In addition, the CMC has adopted Decisions approving a number of important environmental agreements, including an Agreement on Transportation of Hazardous Goods;[223] a Decision requiring Member Countries' customs to provide preferential treatment for vehicles transporting hazardous products, to avoid long delays in unsafe places.;[224] a MERCOSUR Action Plan, which states that MERCOSUR trade goals should be accomplished through effective environmental protection;[225] the MERCOSUR Environmental Frame Agreement, which acknowledges the importance of the environment for the consolidation of MERCOSUR[226] and its Article 3 provides that sustainable development policies shall not include measures that unjustifiably and arbitrarily restrict or distort the free circulation of goods and services within

[221] GMC Resolution 10/94, *available at* http://www.mercosur.int/msweb/portal%20intermediario/pt/index.htm (last visited Oct. 30, 2007) . *See also* Ramos, *supra* note 411, at 42.
[222] GMC Resolution 084/94, *available at* http://www.mercosur.int/msweb/portal%20intermediario/pt/index.htm (last visited Oct. 30, 2007). *See generally* Basso, *supra* note 398, at 414.
[223] CMC Decision 02/94, *available at* http://www.mercosur.int/msweb/portal%20intermediario/pt/index.htm (last visited Oct. 30 2007). *See generally* Basso, *supra* note 398, at 415.
[224] CMC Decision 01/94, *available at* http://www.mercosur.int/msweb/portal%20intermediario/pt/index.htm (last visited Oct. 30, 2007). *See generally* Ramos, *supra* note 411, at 42.
[225] CMC Decision 09/95 (MERCOSUR Action Plan), *available at* http://www.mercosur.int/msweb/portal%20intermediario/pt/index.htm (last visited Oct. 30, 2007). *See* Ramos, *supra* note 411, at 43.
[226] Preamble to CMC Decision 02/201 (MERCOSUR Environmental Frame Agreement), *available at* http://www.mercosur.int/msweb/portal%20intermediario/pt/index.htm (last visited Oct. 30, 2007).

MERCOSUR Member States.[227] In future trade and environment disputes, Article 3 may be applied similarly to Article XX Chapeau of GATT 1994, to prohibit the adoption of measures applied in a manner that unjustifiably restrict or distort trade within MERCOSUR.

B. MERCOSUR Dispute Settlement

MERCOSUR dispute settlement was first regulated by the Brasilia Protocol.[228] This Protocol was proposed on December 17, 1991, and became effective on April 22, 1993. A decade later, the Brasilia Protocol was replaced by the Olivos Protocol.[229] This Protocol was signed by the member countries on February 18, 2002, and became effective on January 1, 2004. The current framework is quite similar to the dispute settlement framework in the WTO.

Under MERCOSUR's current framework, private parties may request that their states bring claims against another member country.[230] Trade panels are composed of 3

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[227] *Id*. Art. 3.
[228] *See* Luiz Olavo Baptista, *Solução de Divergências no MERCOSUL* [*Dispute Settlement in MERCOSUR*], *in* MERCOSUL, *supra* note 214, at 157. *See also* DEISY VENTURA, LAS ASÍMETRIAS ENTRE EL MERCOSUR Y LA UNIÓN EUROPEA: LOS DESAFÍOS DE UNA ASOCIACIÓN INTERREGIONAL [THE ASYMETRIES BETWEEN MERCOSUR AND THE EUROPEAN UNION: CHALLENGES OF AN INTER-REGIONAL ASSOCIATION] 238 (2005).
[229] *See* Olivos Protocol, *available at* http://www.mercosur.int/msweb/principal/contenido.asp (last visited Jan. 15, 2007).
[230] *See* Gabriella G. Lucarelli de Salvio & Jeanine Gama Sá Cabral, *Reflexões sobre o Mecanismo de Solução de Controvérsias do Mercosul e o Impacto no Mecanismo de Solução de Controvérsias da OMC* [*Reflections about the Mercosul Dispute Resolution Mechanism and the Impact of Its Decisions on the WTO Dispute Resolution Mechanism*], 4(I) CEBRI 5, 9-10 (2006) [hereinafter *Reflexões*].

members, and each party involved in the dispute nominates a panelist. The third panelist is nominated by the chosen panelists and may not be a national of any Member State involved in the dispute. This third panelist presides over the proceedings. The trade panel applies MERCOSUR law, which included the Asuncion Treaty and other treaties made under it, decisions of the Common Market Council, and resolutions of the Common Market Group and general principles of international law.[231]

Under the Brasilia Protocol, the parties could not appeal reports issued by MERCOSUR trade panels.[232] The creation of a permanent Appellate Body was among the main innovations brought by the Olivos Protocol.[233]

C. MERCOSUR Case Law on Trade and Environment

MERCOSUR jurisprudence concerning the link between trade and the environment is far less developed than that of the WTO. Prior to the retreaded tire dispute, MERCOSUR tribunals had issued only one decision dealing with this topic. On April 19, 2002, a MERCOSUR panel issued an arbitration award pursuant the Brasilia Protocol,[234] concerning Brazil's prohibition on the importation of phytosanitary

[231] Article 19 of the Brasília Protocol.
[232] Article 21 of the Brasília Protocol.
[233] *See* Lucarelli de Salvio & Gama Sá Cabral, Reflexões, *supra* note 230, at 13.
[234] Award of the Ad Hoc MERCOSUR Arbitration Panel, formed to decide the dispute brought by the Argentine Republic against the Federal Republic of Brazil on barriers to the entrance of phytosanitary products in the Brazilian market: non-incorporation of GMC Resolutions N. 48/96, 87/96, 149/96, 156/96

products.[235] This measure was inconsistent with several resolutions of the Common Market Group concerning requirements for importation of such products within MERCOSUR.[236] Accordingly, Argentina claimed that Brazil violated Articles 38 of the Ouro Preto Protocol, which states that Member Countries are committed to adopt measures necessary to secure compliance with laws or regulations issued by MERCOSUR institutions,[237] and Article 42 of the same Agreement, which states that the laws or regulations issued by MERCOSUR institutions are legally binding on Member Countries.[238]

Brazil, on the other hand, argued that its measure was permissible under Article 50(d) of the 1980 Montevideo Treaty, which allows a Member Country not to adopt

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and 71/98 that impedes their enforcement within MERCOSUR, *available at* http://www.mercosur.org.uy (last visited May 9, 2005) [hereinafter *Brazil – Measures Affecting Imports of Phytosanitary Products*].

[235] A "phytosanitary product" is any substance, biological agent, combination of substances or biological agents, applied to prevent, control or destroy any harmful organism, including undesired species of plants, animals or microorganisms which cause damage or have a negative effect on the production, manufacturing or storing of plants and derived products. The term includes other aids, phyto-regulators, dessicants and substances applied to plants before and after harvest for protection from deterioration during transportation and storing. *See http://www.proz.com/kudoz/723796* (last visited Oct. 30, 2007).

[236] GMC Resolution No. 48/96, which establishes the requirements for the free circulation of phytosanitary products within MERCOSUR, *available at* http://www.mercosur.int/msweb/portal%20intermediario/pt/index.htm (last visited Oct. 31, 2007); GMC Resolution No. 87/96, which regulates the registration procedures for phytosanitary products (active substances and formulas) to circulate within MERCOSUR, *available at* http://www.mercosur.int/msweb/portal%20intermediario/pt/index.htm (last visited Oct. 31, 2007); GMC Resolution No. 149/96, which interprets GMC Resolution No. 48/96; GMC Resolution No. 156/96, which updates the list present in GMC Resolution 87/96 of active substances and formulas that can freely circulate within MERCOSUR, *available at* http://www.mercosur.int/msweb/portal%20intermediario/pt/index.htm (last visited Oct. 31, 2007) ; and GMC Resolution No. 71/98, which updates the list present in GMC Resolution 156/96 of active substances and formulas that can freely circulate within MERCOSUR list, *available at* http://www.mercosur.int/msweb/portal%20intermediario/pt/index.htm (last visited Oct. 31, 2007).

[237] Article 38 of the Ouro Preto Protocol.

[238] *Id.* Article 42.

measures that threaten the life and health of persons, animals and plants. Brazil argued that it was taking its time to analyze whether liberalizing trade of phytosanitary products within MERCOSUR would constitute a threat to the environment and human life and health. Once Brazil had determined that no actual threat existed, it would start internal proceedings to internalize those resolutions.[239] Brazil sustained that the Ouro Preto Protocol does not stipulate a time limit for a country to internalize MERCOSUR laws or regulations.[240]

The Panel was asked to determine whether Brazil's non-incorporation of GMC's Resolutions concerning a common system for MERCOSUR phytosanitary products fell under the public health exception of Article 50 (d) of the 1980 Montevideo Treaty. It concluded that Brazil's non-incorporation of GMC's Resolutions concerning a common system for MERCOSUR phytosanitary products did not fall under the public health exception of Article 50(d) of the 1980 Montevideo Treaty. First, the Panel noted that Brazil had not demonstrated any actual harm to the health of persons, animals and plants that would arise from the establishment of a common system for MERCOSUR phytosanitary products.[241] Second, the Panel found that Article 50(d) did not apply because Brazil had already agreed to create by decree a common system for

[239] Decreto No. 4074, de 4 de janeiro de 2002, D.O.U. de 08.01.2002 (Brazil).
[240] *Brazil – Measures Affecting Imports of Phytosanitary Products*, *supra* note 234, P 5.6.
[241] *Id.* P 9.7.

phytosanitary products with the effect of liberalizing trade of such products within MERCOSUR.[242]

D. Summary

The MERCOSUR framework for addressing trade-environment conflicts is similar to the WTO framework discussed in Chapter I in several important respects. Like the Agreement Establishing the WTO, the Treaty of Asuncion expressly recognizes that the objective of economic development must be achieved with competing goals, including the preservation of the environment. Moreover, the WTO and MERCOSUR both provide exceptions that ostensibly permit members to restrict trade in order to further environmental goals. Finally, both bodies permit disputes to be settled by independent ad hoc trade panels, subject to review by a permanent Appellate Body.

However, there are also important differences between the two frameworks. In the WTO, such measures must be "necessary" to protect human, animal or plant life or health, or "relat[ed]" to natural resource conservation. They must also satisfy the Article XX Chapeau, which prohibits "arbitrary or unjustifiable" discrimination and "disguised" restrictions on trade. In MERCOSUR, trade-restrictive measures are permitted so long as they are "destined to" protect the life and health of persons, animals and plants. There is

[242] *Id*. P 9.8. Decreto No. 4074, de 4 de janeiro de 2002, D.O.U. de 08.01.2002 (Brazil).

no provision equivalent to the Chapeau of GATT Article XX. MERCOSUR case law is also much less developed than that of the WTO. Prior to the retreaded tire dispute, MERCOSUR panels had only addressed trade and environment conflicts in one case. In that case, the trade panel decided that the environmental/health exception did not apply because no harm had been demonstrated.

Finally, unlike the WTO, MERCOSUR has produced a number of legal instruments that directly address environmental policy, and has run several Specialized Meetings on the Environment. In addition, MERCOSUR has set up a permanent working group to promote sustainable development and the preservation of the environment and to formulate policies that guarantee the integrity of the environment within the process of trade liberalization. MERCOSUR has even created an Environmental Frame Agreement, acknowledging the importance of the environment for the consolidation of MERCOSUR.

Chapter III. The MERCOSUR Disputes over Trade in Retreaded Tires

In the previous two Chapters, I examined the framework developed in the WTO and MERCOSUR to address disputes involving conflicts between trade and environmental concerns. In this Chapter, I will examine how this framework was applied by MERCOSUR tribunals with respect to the two MERCOSUR disputes concerning trade in retreaded tires. Section A addresses the MERCOSUR retreaded tire dispute between Uruguay and Brazil. Section B addresses the MERCOSUR retreaded tire dispute between Uruguay and Argentina, which resulted in the first decision ever issued by the new MERCOSUR Appellate Body. Section C summarizes the legal impact of both of these decisions.

A. The Brazil-Uruguay Dispute

In 1991, Brazil's Ministry of Economic, Finance and Planning adopted a "portaria" prohibiting the importation of used tires into Brazil.[243] However, Brazilian courts issued a number of injunctions permitting the importation of used tires, on the ground that the portaria had not been authorized by any law enacted by the Brazilian

[243] Portaria No. 8, de 13 de maio de 1991, D.O.U. de 14.05.1991 (Brazil). Portarias are binding internal administrative acts under which heads of state departments issue general or special determinations to their subordinates.

Congress.[244] In 1999, the Brazilian Ministry of the Environment adopted a resolution requiring manufacturers and importers of new and used tires to dispose of waste tires in an "environmentally adequate" manner.[245]

In 2000, the Brazilian Ministry of Development, Industry and International Commerce issued a new portaria that also banned imports of retreaded tires, which are made from used tires.[246] The following year, the President of Brazil issued a Decree subjecting the importation, marketing, transportation, and storage of retreaded tire imports to a fine of 400 Brazilian reais per tire.[247] In addition, in 2003, the Brazilian Ministry of the Environment issued an amendment clarifying that the requirement of "environmentally adequate" disposal also applied to manufacturers and importers of retreaded tires.[248] Meanwhile, the Brazilian courts continued to issue injunctions permitting imports of both used and retreaded tires on the grounds that they had not been authorized by any Brazilian legislation.

Uruguay initiated dispute settlement proceedings in MERCOSUR to challenge the 2000 ban on imported retreaded tires. It argued that the ban violated CMC Decision No. 22/00, which requires that "the member states shall not adopt any trade restrictive

[244] Brazilian public administration is informed by fundamental principles, such as the principle of legality. The principle of legality, present in Article 37, *caput* of the Brazilian Constitution, states that the activities of the public administration are subject to laws.
[245] Resolução No. 258, de 26 de agosto de 1999, D.O.U. 02.12.1999. No guidance has been provided on what constitutes an environmentally adequate manner.
[246] Portaria No. 8, de 25 de setembro de 2000, D.O.U. de 27.09.2000 (Brazil).
[247] Decreto No. 3.919, de 14 de setembro de 2001, D.O.U. 17.09.2001 (Brazil).
[248] Resolução No. 301, de 21 de março de 2002, D.O.U. 28.08.2003 (Brazil).

measure, of any nature",[249] Article 1 of the Asunción Treaty, which establishes the objective of consolidating the process of integration and economic cooperation; Articles 1 and 10(2) of Annex 1 to the Asuncion Treaty, which bans non-tariff restrictions; and the general international law principle of estoppel.[250] Brazil, on the other hand, argued that its ban on retreaded tire imports did not violate Decision No. 22 or violate the principle of estoppel.[251] First, Brazil argued that the ban was not a new prohibition on retreaded tires, but merely a clarification of its pre-existing ban on imports of used tires. Restrictions on importation of used tires are expressly permitted by MERCOSUR's automotive policy. Brazil argued that retreaded tires are used tires that have been subjected to an industrial process aiming at augmenting their longevity.[252] It noted that Argentina had also banned the importation of retreaded tires based on a finding that retreaded tires are used tires[253] According to Brazil, the 2000 ban on imported retreaded tires was enacted solely to clarify the scope of its previous used tire import ban, rather than to establish a new trade restriction.[254]

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[249] *See* Article 1 of CMC Decision 22/00, *available at* http://www.mercosur.int/msweb/portal%20intermediario/pt/index.htm (last visited Nov. 2, 2007). In the original: "Os Estados Partes não adotarão nenhuma medida restritiva ao comércio recíproco, qualquer que seja a sua natureza, sem prejuízo do previsto no art. 2 b) do Anexo I do Tratado de Assunção."

[250] As discussed above, the Ouro Preto Protocol expressly incorporated general principles of international law as part of MERCOSUR law. *See supra* pp. 145-46.

[251] See Articles 1 and 2 of GMC Resolution No. 109/94, *available at* http://www.mercosur.int/msweb/portal%20intermediario/pt/index.htm (last visited Nov. 2, 2007).

[252] *Id.* at 10.

[253] According to Brazil's argument in the arbitral award, Argentina has alleged that retreaded tires are used tires because they are manufactured from used tires. *See* Arbitral Award VI – Tires – from Uruguay to Brazil – 01/09/2002, at 11, *available at* www.mercosur.org.uy (last visited May 9, 2005 [hereinafter *Brazil Award*].

[254] *Id.* at 9.

1. The Panel's Interpretation of MERCOSUR Law

In its decision, the panel agreed with Uruguay's claim that Brazil's ban on retreaded tire imports was a trade restriction prohibited by Decision 22/00, and rejected Brazil's contention that the ban was justified as part of a prior permissible ban on used tire imports. The panel found that examination of Brazilian laws and regulations concerning trade in retreaded tires and related commercial practices in Brazil supported the conclusion that Brazil considered used and retreaded tires as two different goods, subject to distinct legal treatment.

First, the panel examined the documents emanating from different Brazilian authorities during the almost ten-year period between 1991 and 2000.[255] The Panel rejected Brazil's argument that these documents were not representative of Brazil's official legal understanding on the issue because they were issued by sectors of the Brazilian public administration that do not have the competency to regulate foreign trade in Brazil.[256] It noted that the International Law Commission's Draft Articles on State Responsibility had concluded that "the behavior of any governmental body will be considered as an act of state, regardless of the legislative, executive or judiciary function

[255] The panel looked at a memorandum issued by the National Legal Division, of the Directorate General for Brazil's Customs; Opinion 18/98, of the Directorate General for Brazil's Customs, Letter 154/00, of the Ministry of Development, Industry and Commerce; a memorandum of the Technical Department for Tariffs, of the Ministry of Industry, Commerce and Tourism; Consultation 32/98 before MERCOSUR's Trade Commission; and Regulation 23/96, of Brazil's Environmental Council. *Id.* at 19.
[256] *Id.*

of such body."[257] Consequently, the Panel concluded that the separate laws and regulations issued by different governmental bodies of the Brazilian government were all representative of the country's legal understanding on the legal relationship between used and retreaded tires.[258]

Second, the Panel took into account the evidence presented by Uruguay indicating that there was a continuous and growing trade in used and retreaded tires between that country and Brazil between 1991 and 2000. In the Panel's view, this ongoing trade was warranted by the lack of a specific regulation banning imports of retreaded tires.[259] Accordingly, the panel agreed with Uruguay that the import ban imposed on used tires by the 1991 ban on imported used goods was never intended to be extended to retreaded tires, given the internal practice of Brazil in accepting the importation of Uruguayan retreaded tires during 1991-2000, which indicated that the Brazilian public administration never considered retreaded tires as used tires.[260]

Third, the panel rejected Brazil's argument that GMC Resolution 109/94[261] permitted it to issue national legislation defining the meaning of "used tires," because that

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[257] *See* International Law Commission, Report on the Work of Its Fifty-Second Session, U.N. GAOR, 55th Sess., Supp. No. 10, at 124, U.N. Doc. A/55/10 (2000). For information on the ILC and its work, see http://www.un.org/law/ilc/index.htm (last visited Oct. 10, 2007).
[258] *Brazil Award*, *supra* note 253, at 20.
[259] *Id*. at 18.
[260] *Id.* at 19.
[261] The Common Market Group (GMC) is the executive branch of MERCOSUR. The GMC runs all working groups, ad hoc groups and specialized meetings concerning agricultural matters, the harmonization

resolution expressly permits the implementation of national trade legislation in areas where no MERCOSUR regulation has been adopted.[262] Article 2 of Resolution 109/94 provides that "while a single Regulation mentioned in Article 1 is not approved, the Member States will apply their respective national legislation concerning importation of used goods, either in trading with third countries or within MERCOSUR."[263] The Panel emphasized that the Resolution establishes an exception to the Treaty of Asunción and therefore should be interpreted restrictively.[264] In addition, the panel found that the Resolution did not permit members to adopt "arbitrary" changes in their national trade legislation.[265] In that regard, the Panel concluded that the 2000 ban on imported retreaded tires could not be justified under the Resolution because it contradicted established commercial practices in the region, i.e., the constant and growing trade flow of retreaded tires.[266]

Finally, the panel found that the general international law principle of estoppel did not apply in this case. It agreed with Uruguay's contention that Brazil's ban on imported retreaded tires could give rise to a claim under the general international law principle of "*venire contra factum proprium*" (estoppel or acquiescence, préclusion), which states that

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of technical product norms, the environment, financial services, border control, tourism, etc. (Article 10 of Protocol of Ouro Preto).

[262] *Brazil Award*, *supra* note 253, at 21.

[263] Article 2 of Resolution 109/94. In the original: "Enquanto não se aprovar o Regulamento Comum mencionado no Artigo 1, os Estados Partes aplicarão suas respectivas legislações nacionais referentes à importação de bens usados, tanto no comércio com terceiros países quanto no comércio intra-Mercosul."

[264] *Brazil Award*, *supra* note 253, at 21.

[265] *Id.* at 21.

[266] *Id.* at 21.

"it is an established rule of law that a plea of error cannot be allowed as an element vitiating consent if the party advancing it contributed by its own conduct to the error."[267] The panel found that Brazil's ban on imports of retreaded tires contradicted (a) the extensive commercial practice in Brazil, allowing the importation of retreaded tires from Uruguay and third countries prior to 2000, and (b) the interpretation and application of the existing body of Brazilian law related to the treatment of retreaded and used tires prior to 2000. The Panel concluded that the continuous commercial trade in retreaded tires between Brazil and Uruguay, and official declarations of Brazilian authorities regulating directly or indirectly the importation of used and retreaded tires were sufficient to create a "legitimate expectation" on the part of Uruguay that Brazil would continue to permit imports of imported retreaded tires, and that Brazil was estopped from interfering with this expectation by virtue of the principle of "*venire contra factum proprium.*"[268] However, the Panel found that this principle did not apply to MERCOSUR, since its members were engaged in an integration process, and should therefore rely on principles of "mutual trust" (*confiança*) rather than "*venire contra factum proprium.*"[269]

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[267] *See* the *Temple* case, ICJ Reports (1962), at 26. *See also* IAN BROWNLIE, PRINCIPLES OF PUBLIC INTERNATIONAL LAW 615 (6th ed. 2003) (stating that "[t]here is a tendency among writers to refer to any representation or conduct having legal significance as creating an estoppel, precluding the author from denying the 'truth' of the representation, express or implied.")

[268] *Brazil Award*, *supra* note 253, at 21.

[269] *Id.* at 24 (noting that the application of the principle of estoppel to situations that take place between Member States of integration processes, such as MERCOSUR, cannot overlook the special relation these processes confer upon the Member States).

Accordingly, the Panel decided that the 2000 ban on imported retreaded tires is not compatible with MERCOSUR law and ordered Brazil to adapt its laws to conform to its legal findings.

2. Brazil's Response

In response to the Panel decision, Brazil enacted a new "portaria" eliminating the ban on retreaded tires imported from other MERCOSUR countries,[270] and issued a Presidential Decree exempting retreaded tires imported from other MERCOSUR countries from the financial penalties established under its prior laws.[271] However, the new Portaria expressly stated that imports of retreaded tires from non-MERCOSUR countries would continue to be prohibited.[272]

Although none of the arguments raised by Brazil in the MERCOSUR proceedings dealt with environmental concerns, soon after the MERCOSUR panel issued its decision, the media in Brazil devoted close attention to the negative environmental impacts of the

[270] Portaria No. 17, de 1 de dezembro de 2003, D.O.U. de 2.12.2003 (Brazil) [hereinafter 2003 Portaria].
[271] Decreto No. 4.592, de 11 de fevereiro de 2003.
[272] 2003 Portaria, *supra* note 461, Art. 39. TRF-4, Ap. 2004.70.01.010625-6, Relator: Vilson Darós, D.J.U. 10.05.2006, p. 569, *available at* http://www.trf4.gov.br/trf4/processos/pdf_it2.php?numeroProcesso=200470010106256&dataPublicacao=10/05/2006 (last visited Oct. 13, 2007).

panel's findings. The main newspapers in Brazil published articles with headings such as "*Brazil May Become Garbage Deposit for the World's Waste Tires*".[273]

In July 2003, Brazil's Public Prosecutor (Ministério Público Federal) filed a class action, with a preliminary injunction request, challenging the Presidential Decree exempting retreaded tires imported from other MERCOSUR countries from the financial penalties established under prior law.[274] The class action raised environmental arguments that Brazil had failed to raise in the MERCOSUR proceedings. The Public Prosecutor argued that the Brazilian ban on retreaded tires was justified by the adverse effects that trade in retreaded tires had on the environment itself and on public health in Brazil. The Public Prosecutor argued that trade in retreaded tires violates Article 225 of the Brazilian Constitution, which provides that everyone has the right to an ecologically balanced environment, whose duty to preserve and defend it for present and future generations is borne by the collectivity and the public administration.[275] In order to assure this right, the public administration will control production, commercialization, and the employment of techniques, methods and substances that impose risk to life, quality of life and to the

[273] Silvio Bressan, *Brasil Pode Virar "Lixão" Mundial de Pneus: Com 100 Milhões de Carcaças, País Corre o Risco de Receber Sobras da Europa Via Mercosul* [*Brazil May Become World's Waste Tires Dump: With 100 Million Casings, Country Receiving Unused Tires from Europe via Mercosul*], Jornal O Estado de São Paulo [The State of São Paulo Newspaper], 03.17.2003.
[274] *See* Ação Civil Pública Ministério Público Federal contra União Federal, Porto Alegre, Rio Grande do Sul, 07.02.2003 (on file with author).
[275] *See* Article 225 of the Brazilian Constitution. In the original: "Todos têm direito ao meio ambiente ecologicamente equilibrado, bem de uso comum do povo e essencial à sadia qualidade de vida, impondo-se ao poder público e à coletividade o dever de defendê-lo e preservá-lo para as presentes e futuras gerações". Paragraph 1, section V of the Brazilian Constitution. In the original: "Para assegurar a efetividade desse direito, incumbe ao Poder Público: controlar a produção, a comercialização e o emprego de técnicas, métodos e substâncias que comportem risco para a vida, a qualidade de vida e o meio ambiente."

environment.[276] In support of his argument, he cited the precautionary principle, which allows for the adoption of measures to protect the environment even though the risks are not yet scientifically proved,[277] and Article 50 of the Montevideo Treaty, which expressly permits the adoption of measures aimed at protecting the environment.[278] The class action requested that the new laws exempting imports of retreaded tires from MERCOSUR countries from the prior penalties be struck down, and that the prior fines continue to apply to retreaded tire imports from all countries, without exception.

The class action did not challenge the constitutional validity of the MERCOSUR Panel Report. As pointed out by Celso Amorin, Minister of Foreign Affairs, "for a country that aspires to be the MERCOSUR leader, questioning the Arbitral Award would be like 'a shot on ones own foot', because later Brazil would lose its legitimacy in other disputes of its interest."[279]

The federal judge did not grant the Public Prosecutor's request for preliminary injunction banning imports of retreaded tires.[280] According to her, one cannot assume that because retreaded tires are made from previously used tires are bad for the environment.

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[276] *See id.*
[277] Principle 15 of the Rio Declaration: "In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation. *See Rio Declaration on Environment and Development*, U.N. Doc. A/CONF.151/5/Rev.1 (1992), *reprinted in* 31 I.L.M. 876 (1992).
[278] *See* discussion of Article 50, *supra* Chapter II.
[279] *See* Bressan, *supra* note 273.
[280] J.F. 6, Porto Alegre, Ação Civil Pública No. 2003.71.00.033004-2, Juíza: Ana Inês Algorta Latorre, 22.07.2003 (Brazil).

In addition, the federal judge concluded that imports of retreaded and used tires are positive for the global environment, because Brazil is using goods no longer desired in the European Communities. This interpretation was confirmed in the final ruling.[281]

Moreover, in 2004 the State of Rio Grande do Sul passed a law banning the commercialization of used tires, which are considered to include retreaded tires that have been manufactured outside of Brazil from casings of used tires and imported into Brazil.[282] In 2005, this law was amended to allow the importation and marketing of imported retreaded tires, provided that the importer proves to have destroyed ten used tires in Brazil for every retreaded tire imported. However, in the case of imports of used tire casings, Law 12.381 requires the destruction of one used tire per imported tire.[283]

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[281] J.F. 6, Porto Alegre, Ação Civil Pública No. 2003.71.00.033004-2, Juíza: Ana Inês Algorta Latorre, 04.11.2004 (Brazil).

[282] Lei No. 12.114, de 05 de julho de 2004, D.O.E.R.S. 06.07.2004 (Brazil).

[283] Lei No. 12.381, de 28 de novembro de 2005, D.O.E.R.S. 30.11.2005 Art. 1(Brazil):
Article 1. The sole paragraph of Article 1 of Law 12.114 of July 5, 2004, prohibiting the sale of used tires imported into the State [of Rio Grande do Sul] and from other sources becomes paragraph 1, and the following paragraphs 2 and 3 are added:
Para. 1. …
Para. 2. The following shall be permitted:
I – the import of a used tire carcass where importers can demonstrate that they will collect on Brazilian territory and destroy, in an environmentally adequate manner, 1 (one) existing used tire on the domestic territory for each used tire carcass to be imported;
II – the import of a carcass of a tire retreaded by means of top-capping, remolding, or recapping, outside of Brazil, where importers can demonstrate that they will collect within the domestic territory and destroy, in an environmentally-adequate manner, 10 (ten) existing used tires within the domestic territory for each used tire carcass to be imported.
Para. 3 – tire retreaders shall have the right to import one used tire carcass for each used or retreaded tire exported without having to comply with the environmental counterpart referred to in part I of paragraph 2 of this Article."

B. The Argentina-Uruguay Dispute

In August 2002 – just eight months after the MERCOSUR panel ruled against Brazil's ban on retreaded tire imports – the Argentinean legislature enacted a law banning retreaded tire imports.[284] Three years later, in 2005, Uruguay initiated a second MERCOSUR proceeding to challenge the validity of the Argentinean law.[285]

As in the case initiated against Brazil, Uruguay argued that the Argentinean ban violated CMC Decision 22/00, which requires that the member states shall not adopt any trade restrictive measure, of any nature, and the general international law principle of estoppel. Uruguay also sustained that the Argentinean ban on imported retreaded tires was incompatible with CMC Decision 57/00, which provides that, along the lines of CMC Decision No. 22/00, Member States should eliminate non-tariff restrictions.[286] Finally, Uruguay noted that the measure was inconsistent with the general international law principles of *pacta sunt servanda* and good faith.[287]

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[284] Law No. 25.626, July 17, 2002 (Argentina).

[285] *See* Laudo do Tribunal Ad Hoc do Protocolo de Olivos, sobre a controvérsia "PROIBIÇÃO DE IMPORTAÇÃO DE PNEUMÁTICOS REMODELADOS," *available at* http://www.mercosur.int/msweb/SM/pt/Controversias/TPR/TPR_Tribunal%20AdHoc_Laudo%20Neumaticos_PT.pdf (last visited Jan. 10, 2006) [hereinafter *Argentina Award*], revoked by Laudo do Tribunal Permanente de Revisão constituído para Entender no Recurso de Revisão Apresentado pela Republica Oriental do Uruguai contra o Laudo Arbitral do Tribunal Arbitral Ad Hoc datado de 25 de Outubro de 2005 na Controvérsia "Proibição de Importação de Pneumáticos Remodelados Procedentes do Uruguai,"*available at* http://www.mercosur.int/msweb/SM/es/Controversias/TPR/TPR_Laudo001-2005_Importacion%20de%20Neumaticos%20Remoldeados.pdf (last visited Oct. 11, 2007) [hereinafter *Argentina Apellate Body Award*].

[286] CMC Decision 57, Dec. 12, 2000.

[287] For background information on the principles of pacta sunt servanda and good faith in international law, *see* Free Zones case (1930), PCIJ, Ser.. A, no. 24, p. 12. *See also* Article 26 of the Vienna Convention; BROWNLIE, *supra* note 458, at 17, 592.

Argentina, on the other hand, argued that its ban on imported retreaded tires was justified under the exception set out in Article 50(d) of the Montevideo Treaty.[288] According to Argentina, the 2002 Argentinean ban on imported retreaded tires was "destined to" prevent potential environmental and public health harm caused by the importation of retreaded tires. In order to support this argument, Argentina relied on the legislative history of the measure. First, the legislative debate focused on the need to avoid the entrance of waste disguised as goods with limited durability. Second, the legislative history of the measure also pointed to the negative environmental impact of retreaded tires, in light of the complexity associated with and the high costs of used tire incineration.[289]

Uruguay argued that the ban could not be justified under Article 50(d) as a measure "destined to" protect life and health of persons, animals and plants because a retreaded tire lasts for the exact same amount of time as a new tire; thus no extra burden on the environment is imposed.[290] Argentina responded that Article 50(d) should be interpreted consistently with general international law principles, including the "precautionary principle," which states that "[w]here there are threats of serious or

[288] See discussion of Article 50, *supra* Chapter II.
[289] *Argentina Award*, *supra* note 474, P 35. In the original: "[L]a defensa presentada por Argentina se refiere largamente al processo legislativo des que resultó la aprobación de la Laey No. 25.626, indicando que en el debate parlamentario quedó claro que la medida se destinaba a prevenir el ingreso de resíduos disfrazados de mercaderías con vida útil comprometida o agotada, así como los impactos ambientales, actuales o latentes resultantes de tales mercaderías, teniendo en cuenta la complejidad de su gestión y los elevados costos involucrados."
[290] *Argentina Award*, *supra* note 285, P 18.

irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation."[291] Accordingly, Article 50(d) should be interpreted to apply to measures "destined to" protect against scientifically uncertain risks. Argentina argued that Article 50(d) should be interpreted very broadly, based on the reference to "the preservation of the environment" in the preamble to the Asuncion Treaty;[292] and provisions in the MERCOSUR Environmental Agreement acknowledging the necessity of Member States to cooperate for the protection of the environment and for the sustainable use of natural resources, in order to achieve better quality of life, and social and economic development that is sustainable.[293]

Uruguay also argued that Argentina's import ban was not "destined to" protect environment or health, because the ban was in fact intended to protect the domestic tire industry from import competition, and references to environmental and health concerns

[291] Principle 15 of the Rio Declaration. *See Rio Declaration on Environment and Development*, U.N. Doc. A/CONF.151/5/Rev.1 (1992), *reprinted in* 31 I.L.M. 876 (1992).
[292] Asuncion Treaty, available at http://www.mercosur.int/msweb/principal/contenido.asp (last visited January 15, 2007). The relevant part of the Preamble states that the objective of economic development and social justice shall be achieved under the effective use of available resources, the preservation of the environment, the improvement of the physical interconnections, the coordination of macroeconomic policies of different economic sectors, based on the principles of graduality, flexibility and equilibrium.
[293] Acordo-Quadro sobre Meio Ambiente do Mercosul, available at http://www.cnrh-srh.gov.br/camaras/GRHT/itemizacao/Acordo_quadro_mercosul_2001.PDF (last visited January 15, 2007). Preamble of the Agreement. In the original: "Reconhecendo a necessidade de cooperar para a proteção do meio ambiente e para a utilização sustentável dos recursos naturais, com vistas a alcançar a melhoria da qualidade de vida e o desenvolvimento econômico, social e ambiental sustentável (...) bem como a necessidade de sinergia entre as políticas ambientais e comerciais para assegurar o desenvolvimento sustentável no âmbito do MERCOSUL."

were merely intended to "disguise" this motive.[294] Argentina argued that it had very little motivation to protect the domestic tire industry from imports, since trade in retreaded tires between Argentina and Uruguay had been insignificant [295]prior to the 2002 ban. In addition, Argentina noted that it had unsuccessfully proposed alternative solutions, such as limiting the number of retreaded tires imported from Uruguay to the number of used tires that Argentina exported to Uruguay.[296] Argentina sustained that this proposal not only shows its lack of interest in the retreaded tire trade between the two countries, but it also highlights the policy problem that the measure seeks to correct, namely the reduction of unnecessary generation of waste tire within the Argentinean territory.[297] Argentina argued that Article 50 (d) of the 1980 Montevideo Treaty should be interpreted to include any measure that was even in part motivated by environmental or health concerns, since free trade principles and the protection of the environment rest on equal grounds under

[294] *See Argentina Award*, *supra* note 285, P 38.
[295] The President of the Argentina Panel stated that from 1999 to 2000, the actual value of retreaded tires exported from Uruguay to Argentina was about 50.000 American dollars. In his opinion, this claim against Argentina was brought by Uruguay as a strategic maneuver to guarantee Uruguayan access to the Brazilian market. Once Argentina was banned from imposing restrictions to imports of retreaded tires from Uruguay, it would become evident that the Uruguayan practices concerning exports of retreaded tires within MERCOSUR were absolutely legal. *See* Interview with Dr. Hermes Marcelo Huck, MERCOSUR trade panelist in the retreaded tire dispute between Uruguay and Argentina, in São Paulo, Brazil (Mar. 10, 2006).
[296] *See Argentina Award*, *supra note* 476, PP 26, 34. The Argentineans considered their proposal to be desirable because they would end up exporting more used tires to Uruguay than importing Uruguay's retreaded tires. The logic behind the Argentineans assumption is the following: suppose Argentina exports 100 used tires to Uruguay, and Uruguay exports 100 retreaded tires. It is very likely that not all of the 100 used tires exported to Uruguay will be suitable for retreading, but still Uruguay will only be allowed to export back to Argentina 100 retreaded tires. In this process, it is likely that Uruguay will receive tires that would originally be discarded in Argentina (this assumption is grounded on the fact that the importing country is the one to verify the actual retreading conditions of tires). Interview with Dr. Hermes Marcelo Huck, MERCOSUR trade panelist in the retreaded tire dispute between Uruguay and Argentina, in São Paulo, Brazil (Mar. 10, 2006).
[297] *See Argentina Award*, *supra* note 285, P 34.

MERCOSUR laws and regulations.[298] Lastly, Argentina sustained that the ban was "destined to" environmental and health protection because no other less trade restrictive alternative existed to achieve its chosen level of environmental and health protection.[299]

1. The Panel's Interpretation of MERCOSUR Law

The Panel acknowledged it was before a dispute that confronted two MERCOSUR structural principles: free trade and environmental preservation.[300] The Panel decided in favor of the application of the precautionary and preventive principle to the dispute.[301] It recognized the lack of scientific evidence of the harms used tires cause to public health and the environment, but found that, in light of these principles, Article 50(d) should be interpreted to apply to measures "destined to" protect against environmental and health risks that had not yet been conclusively established.[302]

The Panel noted that the factual elements in the dispute were similar to those in its previous decision involving Brazil. However, the Panel found no basis to grant

[298] *Argentina Award*, P 34.
[299] *Argentina Award*, P 39. Uruguay did not suggest alternative measures Argentina should have adopted in lieu of the import ban. Interview with Dr. Hermes Marcelo Huck, MERCOSUR trade panelist in the retreaded tire dispute between Uruguay and Argentina, in São Paulo, Brazil (Mar. 10, 2006).
[300] *Argentina Award*, P 55. *See also* interview with Dr. Hermes Marcelo Huck, MERCOSUR trade panelist in the retreaded tire dispute between Uruguay and Argentina, in São Paulo, Brazil (Mar. 10, 2006).
[301] Although these two principles are used interchangeably in the *Argentina Panel Report*, they stand for different concepts in environmental law and policy. The preventative principle "implies assessment of risks to avoid harm and action based upon existing knowledge". The precautionary approach "suggests that certain measures should be taken or not taken where scientific uncertainty exists about the likelihood of harm or the degree of environmental risk." *See* ALEXANDRE KISS & DINAH SHELTON, MANUAL OF EUROPEAN ENVIRONMENTAL LAW 39-40 (2nd ed. 1997).
[302] *Argentina Award*, *supra* note 285, P 107.

precedential value to its previous decision, because the disputes were different in significant ways. First, the parties to the Brazilian dispute did not raise Article 50(d)[303] or any of the other general principles of international law and MERCOSUR provisions relating to environmental and health protection.[304] Second, Argentina had brought convincing data and arguments to support the conclusion that the import ban in this case was justified under Article 50(d).[305]

2. The MERCOSUR Appellate Body's Report

Uruguay appealed the Panel's finding to the new MERCOSUR Appellate Body, which had only recently been established and had never before issued a decision in any MERCOSUR dispute. In its first decision, the Appellate Body reversed the Panel's conclusion and found that Argentina's ban on retreaded tire imports violated MERCOSUR law.

The Appellate Body rejected the Panel's view that the dispute should be read as confronting two equally foundational principles: free trade and environmental protection (exceptions to free trade).[306] In the Appellate Body's opinion, in integration processes, such as MERCOSUR, there exists only one foundational principle and that is free

[303] *Id.* P 110.
[304] *Id.* P 110.
[305] *Id.* P 111.
[306] *Id* P 55.

trade.[307] Against this governing principle, exceptions may be opposed, such as the one based on environmental protection.[308] These exceptions, however, must pass a rigorous test.

The Appellate Body found that the panel should first have determined whether Argentina's import ban is a trade restrictive measure. It found that the ban on imports of retreaded tires is a measure that restricts free trade. Second, the Appellate Body found that the panel should have determined whether the trade restrictive measure is discriminatory. Here the Appellate Body found the Argentinean measure to be discriminatory because it is aimed at foreign retreaded tires only. In other words, the Appellate Body concluded that Argentina treated imported retreaded tires less favorably than domestically-produced retreaded tires.[309]

Third, the panel should have determined whether the asserted environmental or health justification for the measure was valid. The Appellate Body found that the environmental justification given by Argentina was not valid, because the legislative history of the ban on imported retreaded tires showed that it was in part aimed at environmental and health protection, but was also aimed at protecting the domestic retreaded tire industry.[310] Accordingly, the ban could not be justified under Article 50(d).

[307] *Argentina Appellate Body Award*, *supra* note 285, P 9.
[308] *Id.* P 9.
[309] *Id.* PP 14, 15.
[310] *Id.* P 16.

The Appellate Body noted that no further analysis was required, since a law passed with any intent of protecting a certain industry of a Member State is inconsistent with MERCOSUR law. However, the Appellate Body decided to complete the analysis, and set out the test that would apply if a valid environmental justification had been found. It stated that, in this case, panels must determine whether the discriminatory effect of the challenged measure was proportional to the interest pursued.[311] Thus, if the Argentinean ban on imported retreaded tires had been grounded on genuine environmental interests, the panel should have determined whether it was more trade restrictive than necessary to achieve the policy objective of environmental conservation.[312]

By majority, the Appellate Body determined that the Argentinean law is inconsistent with MERCOSUR law, based o the correct legal interpretation and application of the exceptions of Article 50 of the 1980 Montevideo Treaty.[313] The Appellate Body concluded that the Argentinean ban on imported retreaded tires was disproportional to the perceived policy goal for several reasons.[314] First, it noted that a retreaded tire is neither waste nor a used tire. This conclusion is important because it dismisses doubts as to the quality of these tires and the treatment they are subjected to

[311] *Id.* P 17.
[312] *Argentina Appellate Body Report*, *supra* note 285, P 17.
[313] *Id.* P 26.2. In the original: "Por mayoría, determinar que la Ley argentina 25.626 promulgada en fecha 8 de agosto de 2002 es incompatible con la normativa Mercosur, en base a una correcta interpretación y aplicación jurídica de las excepciones previstas en el Art. 50 del Tratado de Montevideo de 1980.".
[314] *Argentina Appellate Body Report*, *supra* note 285, P 17.

receiving in international trade.[315]. Second, the alleged harm to the environment is neither serious nor irreversible. Third, other less trade restrictive measures were available. Fourth, the 2002 Argentinean ban on imported retreaded tires does not prevent the alleged harm to the environment. Fifth, the Appellate Body noted that measures to be adopted in the present dispute should be better oriented towards limitation and elimination of tires. Accordingly, the Appellate Body reversed the Panel decision and found that the Argentinean ban on imported retreaded tires was inconsistent with MERCOSUR law:

> Consecuentmente, este TPR en relación a la medida analizada estima, acoge la tesis uruguaya, de que la misma es desproporcionada frente a un producto, neumático remoldeado, que no es un desecho ni un neumático usado según la propria conclusión des laudo arbitral. Consta igualmente en autos de la prohibición tomada no ha reducido objetivamente hablando, el concepto de daño ambiental aplicable as caso. Tampoco es irreversible (presupuestos éstos que se deben dar para la aplicación del princípio precautorio) según lo analiza correctamente la representación uruguaya. Tampoco es proporcional desde el punto de vista de que no se puede impedir el libre comercio, salvo que sea la única medida disponible, eliminando de circulación de un producto extranjero que es igual de seguro a un producto nacional, según el mismo laudo arbitral en revisión; pero que tal vez, y no en todos los casos, es de menor duración. Tampoco es proporcional a nuestro entender porque la medida tomada no previene el daño. Las medidas a ser adoptadas en el caso en questión, ante las presentes circunstancias, deberían estar más bien orientadas a la limitación y eliminación de los neumáticos en desecho.[316]

C. Summary

[315] Remember that Brazil tried to justify its position based on the argument that retreaded tires are used tires, whose imports are prohibited based on a 1991 ban on used goods. *See Brazil Award*, *supra* note 443.
[316] *Argentina Appellate Body Report*, P 17.

This Chapter has demonstrated that in the dispute over trade in retreaded tires between Uruguay and Brazil, Brazil lost an excellent chance to defend its import ban on the basis of the environmental exceptions foreseen in Article 50(d) of the 1980 Montevideo Treaty. Instead, Brazil opted to defend its ban on the ground that it was enacted solely to clarify the scope of its previous ban on imports of used tires), rather than to establish a new trade restriction. The trade panel rejected this argument because it found that used tires and retreaded tires had been treated as different products under various Brazilian regulations and related commercial practices.

Argentina did not make the same mistake in its dispute with Uruguay concerning trade in retreaded tires. The MERCOSUR panel initially accepted Argentina's environmental defense, finding that the Argentinean ban was fell within the environmental exception of Article 50(d) as a measure "destined to" protect the life and health of persons animals and plants. Less than a month after it was rendered, this ruling became the subject of the first report issued by MERCOSUR's new Appellate Body. The report concluded that the Argentinean law violated MERCOSUR law, based on a four-pronged test. Under this test, trade restrictions imposed for environmental reasons are only permissible if the trade-restrictive and discriminatory measure asserts a valid environmental or health justification. If the panel finds that the measure has a valid environmental or health justification, it must still determine whether the discriminatory effect of the challenged measure is proportional to the interest pursued. In concluding that

the Argentinean ban failed both parts of this test, the Appellate Body focused on three main factors: the fact that the measure was motivated by both environmental and economic concerns, that the alleged harm to the environment was neither serious nor irreversible, and the fact that the import ban did not prevent the alleged harm to the environment.

We have also seen that a number of relevant factors were NOT included in the Appellate Body's analysis. First, its decisión did not attempt to analyze the actual economic impact of the measure. Second, the decision included little discussion of the scientific evidence relating to the asserted environmental risks, or to the effectiveness of alternative means that might be used to regulate these environmental risks. Third, although the Appellate Body concluded that the Argentinean measure was at least partially motivated by protectionist interests, it did not analyze the actual political conditions in Argentina that led to the measure. Finally, the decision failed to address the MERCOSUR commitment to environmental protection, or the fragility of the MERCOSUR institutions created to implement this commitment.

Chapter IV. The WTO Dispute over Trade in Retreaded Tires

In the previous chapter, we saw the legal approach adopted in MERCOSUR in response to Uruguay's challenges to Brazilian and Argentinean restrictions on retreaded tire imports. In this chapter, I will focus on the legal approach adopted in the WTO in response to a similar challenge initiated by the European Union (EU).[317] Part A provides background on the dispute. Parts B, C and D discuss the panel's decision relating to GATT Arts. XX(b), XX(d), and the Article XX chapeau. Part E summarizes the analysis of the WTO panel.

A. The EU-Brazil Dispute

Prior to 2000, when Brazil introduced its ban on retreaded tire imports, the EU exported approximately two million retreaded tires per year to Brazil, equivalent to an estimate of 20 per cent of the Brazilian market for such products.[318] The Brazilian measures resulted in company closures and job losses within the Community.[319] In an effort to stem these losses, the *Bureau International Permanent des Associations de*

[317] Because the European Union has no legal personality, it is not technically a member of the WTO. WTO membership belongs to an entity known as the "European Communities" (EC). Although the WTO documents generally refer to the EC, this dissertation will use the more commonly used term "European Union."
[318] *See* Report to the Trade Barriers Regulation Committee Concerning An Obstacle to Trade, Within the Meaning of Council Regulation (EC) No. 3286/94, Consisting of Trade Practices Maintained by Brazil Affecting Trade in Retreaded Tires [hereinafter Report] at 32, *available at* http://trade-info.cec.eu.int/doclib/cfm/doclib_section.cfm?sec=205&lev=2& (last visited May 23, 2005).
[319] *See id.* at 33.

Vendeurs et Rechapeurs de Pneumatique [Permanent International Office of Tire Sellers and Retreaders Association] (BIPAVER).[320]

On January 7, 2004, the European Commission initiated an investigation into Brazilian practices relating to imports of retreaded tires in response to this complaint. As a result of the EU investigation, the European Commission's Directorate-General for Trade issued a Report[321] recommending that the EU initiate proceedings to challenge the Brazilian measures in the WTO. The Commission initiated formal dispute settlement proceedings in the WTO after a series of unsuccessful efforts to negotiate a diplomatic solution. Argentina, Australia, Korea and the United States joined the proceedings as interested third parties, followed by China, Cuba, Guatemala, Mexico, Paraguay, the Chinese Taipei, and Thailand.[322]

The EU claimed that Brazil's ban on retreaded tire imports from non-MERCOSUR countries, and its imposition of penalties relating to such imports, were non-tariff restrictions on trade prohibited by GATT Article XI. In addition, it argued that the laws enacted by the state of Rio Grande do Sul in relation to imports of retreaded tires

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[320] *See* Notice of Initiation of an Examination Procedure Concerning Obstacles to Trade Within the Meaning of Council Regulation (EC) No. 3286/94, consisting of trade practices maintained by Brazil in relation to imports of retreaded tires, *available at* http://trade-info.cec.eu.int/doclib/html/115548.htm (last visited May 23, 2005).

[321] *Id.*

[322] Panel Report, *Brazil – Measures Affecting Imports of Retreaded Tires*, WT/DS332/R (June 12, 2007), P 1.7 [hereinafter *Brazil – Retreaded Tires*].

accorded "less favorable treatment" to imported goods than to "like" products of domestic origin, in violation of GATT Article III:4 (National Treatment).[323]

Brazil contended that the import ban and financial penalties were justified under Article XX(b) of the GATT 1994, which allows a country to depart from its WTO commitments if necessary to protect human, animal or plant life or health, provided that it does not do so in a manner that would constitute "arbitrary or unjustifiable discrimination" or a "disguised restriction on international trade." It also contended that the financial penalties applicable to importers of retreaded tires were justified under Article XX(d), which allows a country to depart from its trade commitments if the challenged measure is "necessary to secure compliance with laws and regulations which are not inconsistent with the provisions of this Agreement (...)".[324]

On June 12, 2007, the Panel issued its Report. The panel found that the ban on the importation of retreaded tires and the financial penalties on imported retreaded tires constituted non-tariff trade restrictions in violation of GATT Article XI:1. and that the Rio Grande do Sul laws discriminated against "like" imported products in violation of GATT Article III.[325] The Panel then analyzed whether these violations were justified under Article XX of GATT 1994.

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[323] *Id.* P 3.1. The Rio Grande do Sul law is discussed supra p. 136. In addition, the EC claimed other GATT 1994 violations which were ignored by the Panel.
[324] *Brazil – Retreaded Tires*, *supra* note 322, P 3.3.
[325] *Id.* PP 7.34, 7.39, 7.447.

B. The Panel's Analysis under GATT Article XX(b)

In deciding whether a measure is "necessary to protect human, animal or plant life or health", the Panel recalled the Report of the Panel in *US – Reformulated Gasoline*, which requires the existence of two elements:[326]

> (a) the policy in respect of the measures for which the provision is invoked falls within the range of policies designed to protect human, animal or plant life or health; and
>
> (b) the inconsistent measure for which the exception is invoked is *necessary* to fulfill the policy objective.[327]

The panel found that the import ban, financial penalties, and state laws satisfied both of these tests. The panel concluded that these measures fell within the range of policies designed to protect human, animal or plant life or health because (1) a risk to human and animal or plant life or health did in fact exist; and (2) the objective of the import prohibition was in fact to reduce such risk.[328]

With respect to the issue of whether a risk to human and animal or plant life or health in fact existed, Brazil argued that the accumulation of waste tires creates a risk of

[326] *See id.* P 7.40. *See also US – Reformulated Gasoline*, *supra* note 43, P 6.20.
[327] *US – Reformulated Gasoline*, *supra* note 43, P 6.20.
[328] *Brazil – Retreaded Tires*, *supra* note 322, PP 7.43, 7.102.

mosquito-borne diseases such as dengue and yellow fever in Brazil because waste tires create perfect breeding grounds for disease carrying mosquitoes and that these diseases are also spread through interstate transportation of waste tires for disposal operations. Brazil also contended that the accumulation of waste tires creates a risk of tire fires and toxic leaching and that this risk has substantial adverse effects on human health and the environment. The European Communities did not dispute the existence of health risks to humans in connection with mosquito-borne diseases. On the other hand, the EU argued that Brazil had not demonstrated that there was a specific link between the spread of mosquito-borne diseases or the harmful effects of tire fires and the accumulation of waste tires.[329]

Concerning the question whether the objective of Brazil's import prohibition was the reduction of these risks, Brazil argued that the sole policy objective behind its measures is the protection of human health and the environment, by preventing the generation of additional waste tires in Brazil and consequently reducing the incidence of dengue, yellow fever and other risks associated with waste tires. The European Communities, however, argued that the real objective of Brazil's import ban is not the protection of life and health but the protection of its domestic industry.[330]

[329] *Id.* PP 7.53, 7.54.
[330] *Id.* PP 7.94, 7.95.

Likewise, in the MERCOSUR dispute between Uruguay and Argentina, the panel accepted the arguments made by Argentina that connected the policy in respect of the measures for which Article 50 (d) of the 1980 Montevideo Treaty was invoked as falling within the range of policies designed to protect human, animal or plant life or health. In addition, that panel also considered the Argentinean law banning imports of retreaded tires necessary to prevent the generation of additional waste tires in Argentina.[331]

The panel found that the challenged measures were also all necessary to fulfill the policy objective of reducing the risks arising from the accumulation of waste tires, based on (1) "a process of weighing and balancing" of the "relative importance of the interests or values furthered" by the measures, the "contribution" of the measures to the realization of the ends pursued, and the "restrictive impact" of the measures on international trade;[332]and (2) a comparison between the challenged measure and possible alternatives to determine "whether a WTO-consistent alternative measure, or less WTO-inconsistent measure, which the Member concerned could reasonably be expected to employ, is available."[333]

[331] *See* Argentina Award, *supra* Chapter III. Note however, that the panel decision was revoked by MERCOSUR's Appellate Body because it concluded that the panel had wrongly interpreted the exceptions of Article 50 of the 1980 Montevideo Treaty. *See Argentina Appellate Body Award*, *supra* Chapter III.
[332] *See Brazil – Retreaded Tires*, *supra* note 322, P 7.104.
[333] *Id.*

With respect to the balancing test, the Panel found that the objective of protecting human health and life against life-threatening diseases, such as malaria and dengue fever, was both "important and vital in the highest level,"[334] and that the objective of protecting animal and plant life and health should also be considered "important.[335] The panel also found that the measures contributed to the realization of the policy of reducing exposure to the risks to human, animal and plant life and health arising from the accumulation of waste tires,[336] since they contributed to the reduction of the number of waste tires generated in Brazil, which in turn contributed to the reduction of the risks to human, animal and plant life and health arising from waste tires.[337] Finally, the panel concluded that all the measures – and particularly the import ban -- had a significant restrictive impact on trade in retreaded tires from non-MERCOSUR countries."[338]

Having found that the measures contributed to the realization of important interests or values, but also significantly restricted international commerce, the Panel turned to determine whether a WTO-consistent alternative measure, or less WTO-inconsistent measure, which the Member concerned could reasonably be expected to

[334] *Id.* P 7.111.
[335] *Id.* P 7.112.
[336] *See id.* P 7.122. The Panel noted that retreaded tires have "by definition a shorter lifespan than new tires." If Brazilian consumers who would otherwise buy imported retread tires instead bought new tires with longer life spans, "overall less tires would be necessary to fulfill the needs of the market." *See Brazil – Retreaded Tires*, *supra* note 322, P 7.130. Similarly, if more domestically produced tires were retreaded, the import ban might contribute to the "reduction of the overall amount of tires generated in Brazil." *Id*. P 7.142.
[337] *See id*. P 7.147.
[338] *Id.* P 7.114.

employ, was available.[339] The panel considered each of the alternative measures identified by the EU as ways of reducing the number of waste tires in Brazil,[340] or improving the management of waste tires in Brazil.[341] However, it concluded that none of these measures constituted "reasonably available alternatives" that would "achieve Brazil's objective of reducing the accumulation of waste tires on its territory." Accordingly, it found that the measures found to violate GATT rules were all 'necessary' within the meaning of Article XX(b) and thus provisionally justified under Article XX(b)."[342]

C. The Panel's Analysis Under GATT Article XX(d)

As discussed above, Brazil also argued that its financial penalties were justified under GATT Article XX(d)., which reads as follows:

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[339] *See* Appellate Body Report on *United States – Measures Affecting the Cross-Border Supply of Gambling and Betting Services*, P 308, WT/DS285/AB/R (adopted April 20, 2005): "An alternative measure may be found not to be 'reasonably available', however, where it is merely theoretical in nature, for instance, where the responding Member is not capable of taking it, or where the measure imposes an undue burden on that Member, such as prohibitive costs or substantial technical difficulties. Moreover, a 'reasonably available' alternative measure must be a measure that would preserve for the responding Member its right to achieve its desired level of protection with respect to the objective pursued…".

[340] The EC identified various measures to reduce the number of waste tires in Brazil, including, for instance, education campaigns and the use of government procurement to require the installation of retreaded tires on government vehicles; measures to improve the low suitability of Brazilian passenger car tires for retreading; measures that would reduce the use of cars in Brazil; measures aiming at a longer safe use of retreaded tires; and measures to prevent the constant and growing flow of used tires into Brazil. *See Brazil – Retreaded Tires*, *supra* note 322, P 7.160.

[341] The EC contended that Brazil already had in force measures to achieve the policy objective of domestic management of waste tires, including a voluntary multi-sector program to collect waste tires for disposal, and a CONAMA resolution requiring domestic manufacturers of new tires and tire importers (new and retreaded) to dispose of waste tires in an "environmentally adequate" manner. Moreover, the EC argued that federal waste tires collection programs, controlled land filling, stockpiling, energy recovery and material recycling constitute disposal methods that are alternative to the import prohibition. *Id.* PP 7.161, 7.181.

[342] *Id.* P 7.215.

> Subject to the requirement that such measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade, nothing in this Agreement shall be construed to prevent the adoption or enforcement by any contracting party of measures …(d) necessary to secure compliance with laws or regulations which are not inconsistent with the provisions of this Agreement, including those relating to customs enforcement, the enforcement of monopolies operated under paragraph 4 of Article II and Article XVII, the protection of patents, trademarks and copyrights, and the prevention of deceptive practices;

The Panel recalled the Appellate Body Report on *Korea – Various Measures on Beef* that stated the need to demonstrate the following two elements for a measure, otherwise inconsistent with the GATT 1994, to be justified provisionally under paragraph (d) of Article XX:[343]

> (i) the measure must be designed to "secure compliance" with laws or regulations that are not themselves inconsistent with some provision of the GATT 1994; and
>
> (ii) the measure must be "necessary" to secure such compliance.

It was undisputed that the fines are a measure introduced to enforce the import ban and that they are indeed a measure the existence of which would be meaningless without the import prohibition. Consequently, the Panel notes that the fines are "designed

[343] *Id*. P 7.384. *See also* Appellate Body Report on *Korea – Various Measures on Beef*, P 157.

to secure compliance with the import ban."[344] However, it follows that for the fines to be justified under paragraph (d) of Article XX of General Agreement, they be must be "designed to secure compliance *with laws or regulations not themselves inconsistent with some provision of the GATT 1994*." Provided that the very regulation, i.e. the import ban under the 2004 ban on imported retreaded tires, was found not to be consistent with Article XX of the General Agreement, the Panel concluded that the fines cannot be justified under Article XX(d). Thus, the Panel found unnecessary to address the second prong of the test set in *Korea – Various Measures on Beef*, i.e. whether the fines are necessary to secure such compliance.[345] In conclusion, the Panel found that the fines imposed by the 2001 regulation concerning fines on importation, marketing, transportation, storage, keeping or warehousing of retreaded tires are inconsistent with Article XI:1 and not justified under Article XX(b) or under Article XX(d) of GATT 1994.[346]

D. The Panel's Analysis under the Article XX chapeau

In order to complete the Article XX analysis, the Panel needed to determine whether the measure is applied in a manner that is consistent with the chapeau of Article XX. The chapeau of Article XX reads as follows:

[344] *See Brazil – Retreaded Tires*, *supra* note 322, P 7.387.
[345] *Id.* P 7.389.
[346] *Id.* P 7.390.

> Article XX (*General Exceptions*). Subject to the requirement that such measures are not applied in a manner which would constitute a means of *arbitrary or unjustifiable discrimination between countries where the same conditions prevail*, or a *disguised restriction on international trade*, nothing in this Agreement shall be construed to prevent the adoption or enforcement by any contracting party of measures: …" (emphasis added).

The Panel recalled the Appellate Body's ruling in *US – Gasoline* to base its decision to limit its analysis to the manner in which the measure is applied, and not so much the questioned measure or its specific contents as such.[347] Therefore, concerning the chapeau of Article XX, the Panel centered its attention on "whether, although the measure itself falls within the terms of Article XX(b), the *application* by Brazil of its import ban on retreaded tires is such as to constitute 'a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail' or 'a disguised restriction on international trade'":[348]

> [W]e note the Appellate Body's indication that 'the fundamental theme – when interpreting the chapeau – is to be found in the purpose and object of *avoiding abuse or illegitimate use of the exceptions* to substantive rules available in Article XX'; and that the task of interpreting this introductory paragraph is essentially the 'delicate one of *locating and marking out a line of equilibrium* 'between the rights of the Member invoking the exception and those of other WTO Members. *This line of equilibrium is not fixed and unchanging* and moves 'as the kind and the shape of the measures at stake vary and as the facts making up specific cases differ.'"[349] (emphasis added) (footnotes omitted).

[347] *Id.* P 7.220. *See also* Appellate Body Report on *US – Gasoline*, P 21.
[348] *See Brazil – Retreaded Tires*, *supra* note 322, P 7.220.
[349] *See id.* P 7.221.

The Panel observed that three types of situations concerning the application of measures provisionally justified under a specific paragraph of Article XX might lead to an inconsistency with the chapeau of the said Article:[350] first, arbitrary discrimination between countries where the same conditions prevail; second, unjustifiable discrimination between countries where the same conditions prevail; and third, a disguised restriction on international trade. In the present dispute, the Panel decided to address the existence of arbitrary and unjustifiable discrimination separately from the existence of a disguised restriction on international trade.[351] In order to determine if a measure is applied in a manner that constitutes a means of "arbitrary or unjustifiable discrimination between countries where the same conditions prevail", three conditions should be met:[352]

(a) The application of the measure results in discrimination;

(b) The discrimination is arbitrary or unjustifiable in character;

(c) This discrimination occurs between countries where the same conditions prevail.[353]

[350] *Id.* P 7.223.
[351] *Id.* P 7.225.
[352] *Id.* P 7.226.
[353] *See Brazil – Retreaded Tires*, *supra* note 322, P 7.226. *See also* Appellate Body Report on *US – Shrimp*, P 150.

In order to determine whether the import prohibition on retreaded tires is applied in a manner that results in discrimination, the Panel analyzed three different situations that were described by the European Communities as discriminatory practices maintained by Brazil in relation to the EU's retreaded tires. First, the Panel considered whether discrimination arises from the MERCOSUR exemption, i.e. the exemption of remolded tires originating in MERCOSUR countries from the import ban.[354] The Panel concluded that "the MERCOSUR exemption can be considered to form part of the manner in which the import ban imposed by Brazil on retreaded tires – the measure provisionally justified under Article XX(b) – is applied and that it gives rise to discrimination within the meaning of the chapeau of Article XX, between MERCOSUR and non-MERCOSUR countries."[355] Second, the Panel addressed whether discrimination arises from the importation of used tires through court injunctions[356] and concluded that "to the extent that [the court injunctions] enable retreaded tires to be produced in Brazil from imported casings while retreaded tires using the same casings cannot be imported, permitting imports of used tires through court injunctions results in discrimination in favor of tires retreaded in Brazil using imported casings, to the detriment of imported retreaded tires."[357] Third, the Panel examined whether discrimination arises from the lack of comparable measures in relation to new tires,[358] in light of the EU's contentions that Brazil has not adopted any measure to guarantee that new tires consumed in Brazilian

[354] *See Brazil – Retreaded Tires*, *supra* note 322, P 7.233.
[355] *Id.* P 7.238.
[356] *Id.* P 7.238.
[357] *Id.* P 7.243.
[358] *Id.* P 7.243.

territory are retreaded when they become used tires, and that Brazil does not restrict the importation and sale of non-retreadable new tires.[359] With regard to the first contention, the Panel concluded "that Brazil has established that, prima facie, the tires produced domestically have the capacity to be retreaded in Brazil, and that the European Communities has failed to demonstrate that these tires are not suitable for retreading."[360] Concerning the second contention, the Panel concluded "that Brazil has established that, prima facie, the new tires it allows onto the market are of retreadable quality meeting relevant international standards, and that the European Communities has failed to demonstrate that new tires sold in the Brazilian market (whether produced in or imported into Brazil) are low-quality tires not suitable for retreading, such that this would constitute discrimination against imported retreaded tires."[361] Accordingly, the Panel found that no discrimination arises from the lack of comparable measures in relation to new tires. However, as established in the WTO jurisprudence,[362] a discriminatory practice maintained by one Member country is WTO-inconsistent if it is "arbitrary and/or unjustifiable" within the terms of the chapeau of Article XX.[363]

As for the question of whether the discrimination in the application of the measure is "arbitrary"[364] and/or "unjustifiable"[365], the Panel focused on the application of

[359] *See Brazil – Retreaded Tires*, *supra* note 322, P 7.244.
[360] *Id.* P 7.247.
[361] *Id.* P 7.250.
[362] *Id.* P 8.226.
[363] *Id.* P 7.251.
[364] The term "arbitrary" was interpreted according to the Panel Report on *US – Shrimp (Article 21.5 – Malaysia)* and Appellate Body Report on *US – Shrimp*:

the MERCOSUR exemption and on the permission of imports of used tires through court injunctions, both of which the Panel found to be discriminatory. Concerning the MERCOSUR exemption, the Panel found that it has not resulted in the measure being applied in a manner that would constitute arbitrary or unjustifiable discrimination.[366] The Panel took into account Brazil's contention that the MERCOSUR exemption is neither unjustifiable nor arbitrary because it results from Brazil's obligation to adopt a decision of a MERCOSUL Panel, which required it to permit MERCOSUR imports of retreaded tires.[367] This alone does not render Brazil's course of action capricious or unpredictable. Next, the Panel addressed "the manner in which the import ban is applied, taking into account the existence of an exception for MERCOSUR members, in order to determine whether the discrimination arising from the MERCOSUR exemption is arbitrary or unjustifiable."[368] The Panel concluded that the MERCOSUR exemption would indeed be

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> "In *US – Shrimp (Article 21.5 – Malaysia)*, the Panel similarly considered 'the ordinary meaning of the word 'arbitrary', i.e. 'capricious, unpredictable, inconsistent''. In the same case, the Appellate Body highlighted two factors that it found, in that case, to be relevant to an assessment of whether the measure was arbitrary within the meaning of the chapeau of Article XX, namely 'rigidity and inflexibility' of the application of the measure; and the fact that the measure is imposed without inquiring into its appropriateness for the conditions prevailing in the exporting countries."

See Brazil – Retreaded Tires, *supra* note 510, P 7.258. *See also* Panel Report on *US – Shrimp (Article 21.5 – Malaysia)*, P 5.124; Appellate Body Report on *US – Shrimp*, P 177.

[365] The Panel interpreted the term "justifiable" as "the need to be able to 'defend' or convincingly explain the rationale for any discrimination in the application of the measure." *See Brazil – Retreaded Tires*, *supra* note 512, P 7.260. *See id.* P 7.261:

> "In its ruling on *US – Gasoline*, the Appellate Body found that discrimination that could have been 'foreseen' and that was not 'merely inadvertent or unavoidable' would be unjustifiable. Two specific elements for the justification of the discrimination can also be identified in the Panel and in the Appellate Body reports in *US – Shrimp* and *US – Shrimp (Article 21.5 – Malaysia)*: first, a serious effort to negotiate with the objective of concluding bilateral and multilateral agreements for the achievement of a certain policy goal, and secondly, the flexibility of the measure."

[366] *Id.* P 7.289.

[367] *Id.* P 7.270.

[368] *Id.* P 7.288.

unjustifiable if imports were to take place in amounts that would undermine Brazil's policy objective to reduce the accumulation of waste tires. However, the Panel noted that, at the time of the examination proceedings, volumes of imports of retreaded tires were insignificant to compromise the stated goal of the ban.[369] As for the allowance of imports of used tires through court injunctions, the Panel concluded that "since used tires have been taking place under the court injunctions in such amounts that the achievement of Brazil's declared objective is being significantly undermined, the measure at issue is being applied in a manner that constitutes a means of unjustifiable discrimination."[370]

After concluding that the import ban is being applied in a manner that constitutes a means of unjustifiable discrimination, the Panel turned to the issue of whether the discrimination occurs between countries where the same conditions prevail, concluding in the affirmative:

> The European Communities has argued that 'it is manifest that a casing originating in the Eu[r]opean Communities is not more problematic from a waste management point of view just because it is retreaded in the Eu[r]opean Communities rather than in Brazil'. In this respect, we recall our earlier observation that it has not been suggested by either party that there was any significant difference between retreaded tires made in Brazil from imported casings and imported retreaded tires. We also note that Brazil has not identified any difference between the conditions prevailing in Brazil and in other WTO Members, that would be pertinent in the context of considering whether the discrimination between countries where the same conditions prevail. In light of these elements, *we conclude*

[369] *See Brazil – Retreaded Tires*, *supra* note 512, PP 7.287, 7.288.
[370] *Id.* P 7.306.

> *that this discrimination occurs between countries where the same conditions prevail*."[371] (emphasis added) (citations omitted).

Finally, having found that the import prohibition on retreaded tires is an unjustifiable discrimination between countries where the same conditions prevail, the Panel moved to determine whether it constitutes a disguised restriction on international trade. In order for the application of a measure to constitute a disguised restriction on international trade, three elements must exist:[372]

> (a) the assessment of whether a violation arises under this part of the chapeau of Article XX relates to the manner in which the measure is applied;
>
> (b) the measure is applied in a manner that would constitute a restriction on international trade;
>
> (c) a violation arises if this restriction on international trade is disguised.

From the outset, the Panel recalls the Appellate Body's definition on *US – Gasoline* of a *disguised restriction* within the meaning of the chapeau of Article XX:

> 'Arbitrary discrimination', 'unjustifiable discrimination' and 'disguised restriction' on international trade may … be read side-by-side; they impart meaning to one another. It is clear to us that 'disguised restriction' includes disguised discrimination in international trade. It is equally clear that concealed or unannounced restriction or discrimination in

[371] *Id.* P 7.309.
[372] *Id.* P 7.315.

> international trade does not exhaust the meaning of 'disguised restriction'.[373]

The EU argued that the import ban is a disguised restriction on international trade because it is not motivated by genuine environmental interests, but by concealed interests to protect the domestic industry from the competition of foreign industry. In this sense, for instance, the EU contended that the fact that the import ban emanates from the Ministry responsible for Development, Industry and Foreign Trade, and not by the Ministry of the Environment, indicates that the intention of the measure is not to protect the environment and public health.[374] However, the Panel concluded that the fact that the ban has been adopted by the Ministry of Development, Industry and Foreign Trade in an instrument regulating import licensing does not imply that the specific prohibition it contains in relation to retreaded tires could not have reflected health and environmental objectives."[375] Overall, the Panel was not persuaded that the elements presented to them by the EU conclusively demonstrate that Brazil did not adopt the prohibition on importation of retreaded tires with the intention of protecting the public health or the environment.[376] Moreover, the EU contended "that the ban protects new tire manufacturers in Brazil, who benefit from not facing competition from imported retreads, and that the import ban is applied in a manner that amounts to a disguised restriction on

[373] *See Brazil – Retreaded Tires*, *supra* note 322, P 7.318. *See also* Appellate Body Report on *US – Reformulated Gasoline*, *supra* note 43, p. 25.
[374] *See Brazil – Retreaded Tires*, *supra* note 322, P 7.328.
[375] *Id.* P 7.331.
[376] *Id.* P 7.341.

international trade, to the benefit of Brazilian and other MERCOSUR retreaders."[377] In light of this contention, the Panel felt compelled to address the existence of a disguised restriction on international trade in the manner in which the import ban is applied under the same circumstances that gave rise to the investigation of application of the import ban in a manner that could constitute an arbitrary and/or unjustifiable discrimination where the same conditions prevail, namely the importation of used tires through court injunctions and the application of the MERCOSUR exemption. The analysis of the Panel to determine whether the application of the import ban on retreaded tires constitutes a disguised restriction on international trade led to the following conclusions:

> [T]he Panel finds that, since imports of used tires are taking place to the benefit of the Brazilian retreading industry in such quantities as to seriously undermine the achievement of the stated objective of avoiding the further accumulation of waste tires in Brazil, the measure at issue is being applied in a manner that constitutes a disguised restriction on international trade. We also find that the MERCOSUR exemption, although is also has the potential to similarly undermine the achievement of the stated objective of the measure, has not been shown to date to result in the measure at issue being applied in a manner that would constitute such a disguised restriction on international trade.[378]

As results of the overall analysis of the Article XX(b) exception applied to Article 40 of the 2004 ban on imported retreaded tires – the principal current legal basis of the ban on the importation of retreaded tires into Brazil, the Panel concluded that although the Brazilian import prohibition on retreaded tires is provisionally justified under

[377] *Id.* P 7.346.
[378] *Id.* P 7.355.

paragraph (b) of Article XX, it is applied in a manner that constitutes a means of unjustifiable discrimination and a disguised restriction within the meaning of the *chapeau* of Article XX of GATT 1994.[379]

E. Summary

This Chapter has demonstrated that WTO panel's analysis of the retreaded tire dispute pays more attention to environmental considerations than the approach adopted in MERCOSUR. The panel determined that the Brazilian import ban fell under paragraph (b) of GATT Article XX, as a measure "necessary" to protect human, animal or plant life or health. However, at the end of the day, neither panel was willing to uphold Brazil's import ban. The WTO ruled against the ban on the grounds that the ban had been applied in a manner that resulted in "arbitrary or unjustifiable" discrimination and a "disguised" restriction on trade. In reaching this conclusion, the panel relied heavily on the fact that the Brazilian courts continue to allow imports of used tires, which benefit the domestic retreading tire industry. Like the MERCOSUR Appellate Body, the WTO panel did NOT consider the actual economic impact of the import ban; the scientific aspects of the dispute; the political situation that led to adoption of the ban; or the potentially harmful consequences that the decision might have on support for WTO institution in developing countries such as Brazil.

[379] *See Brazil – Retreaded Tires*, *supra* note 322, PP 7.356, 7.357.

Chapter V. The Lessons of Regulatory Competition Theory

This Chapter examines the literature on regulatory competition theory – which asserts that there are significant welfare gains to be derived from allowing a proliferation of different regulatory standards -- to see if it holds any useful lessons for WTO and MERCOSUR panels deciding trade-environment disputes such as the dispute involving retreaded tires. Section A explains the foundational elements of that theory in economic terms. Section B examines the theory of regulatory competition in law, particularly environmental regulation. Section C analyzes the lessons of the regulatory competition literature examined in the two previous Sections and argues that these welfare gains will depend on a number of specific factors largely ignored by the WTO and MERCOSUR decisions.

A. The Economics of the Regulatory Competition Theory

Two contrasting views on interjurisdictional competition divide the literature on local public finance.[380] The seminal work of Charles Tiebout[381] contends that interjurisdictional competition is a beneficent force that, similar to its function in the

[380] *See* Wallace E. Oates & Robert M. Schwab, *Economic Competition among Jurisdictions: Efficiency Enhancing or Distortion Inducing?*, 35 J. PUB. ECON. 333 (1988) (arguing that local choices under simple-majority rule will be socially optimal for jurisdictions homogeneous in workers and that distortions in local fiscal decisions and in local environmental choices arise in cases where jurisdictions are not homogeneous).
[381] *See* Charles Tiebout, *supra* note 6, at 416; *But see* Truman F Bewley, *A Critique of Tiebout's Theory of Local Public Expenditures*, 49 ECONOMETRICA 713 (1981) (arguing that the conditions under which interjurisdictional competition produces an equilibrium that is Pareto optimal are quite limited).

market for private goods, compels public agents to make efficient decisions.[382] Tiebout's economic model for public expenditures assumes that[383] consumer-voters are fully mobile and will move to a community that best satisfies their preferences patterns. In this model, differences across residents in preferences for environmental quality are not taken into account, because migration ("voting with one's feet") should eliminate such differences, giving rise to jurisdictions defined by constituents' preferences for environmental standards and other public goods.[384] Tiebout's model also assumes that consumer-voters are fully informed about revenue and expenditure patterns, consumer-voter are free to live in a variety of communities, there are no restrictions due to employment opportunities and everyone is assumed to live on dividend income. Under the model, public services supplied show no external economies or diseconomies between communities and there is an optimum community size for every pattern of community services, whereas the older residents of the community set community services and the number of residents for which services can be produced at the lowest average cost defines optimality. Finally, the model assumes that communities below the optimum size seek to attract new consumer-voters to lower the average costs of providing services.

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[382] *See* Oates and Schwab, *supra* note 77.
[383] Tiebout, *supra* note 6, at 419.
[384] *See* John Douglas Wilson, *Capital Mobility and Environmental Standards: Is There a Theoretical Basis for a Race to the Bottom?*, *in* 1 FAIR TRADE AND HARMONIZATION: PREREQUISITES FOR FREE TRADE? 393, 400 (Jagdish N. Bhagwati & Robert E. Hudec eds., 1996).

Under the Tiebout's economic model, perfect mobility is assumed and it is subject to preferences of consumer-voters, who will move from communities with greater than optimal size to communities with less than optimal size. His model implies that each community has a revenue and expenditure pattern that reflects the desires of its residents.[385] Tiebout's model also assumes that local governments do not adapt to consumer-voter's preferences; on the contrary, the local governments that attract the optimum number of residents are viewed as being adopted by the economic system.[386] Finally, Tiebout's model compares prices in the private market with taxes in the community.[387] Tiebout concludes that interjurisdictional competition is desirable[388] and that a race to the bottom is precluded because local governments have a considerable ability to use tax instruments to effectively charge efficient cash payments from firms.[389]

William Fischel extended Tiebout's economic model to the environmental protection versus firms' location debate, to conclude that interjurisdictional competition is desirable whenever externalities are internalized; that is, polluters compensate local residents for forgone environmental quality.[390]

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[385] *Id.* at 420.
[386] *Id.*
[387] "Just as the consumer may be visualized as walking to a private market place to buy his goods, the prices of which are set, we place him in the position of walking to a community where the prices (taxes) of community services are set." *Id.* at 422.
[388] *Id*. at 418.
[389] *See* Wilson, *supra* note 384, at 402.
[390] *See* William A. Fischel, *Fiscal and Environmental Considerations in the Location of Firms in Suburban Communities*, *in* FISCAL ZONING AND LAND USE CONTROLS 119 (Edwin S. Mills & Wallace E. Oates eds., 1975) (provided that consumer-voters are fully mobile and are not sensitive to employment opportunities).

An influential article by Wallace Oates and Robert Schwab concluded that interjurisdictional competition might be a source of distortion in public choices.[391] One strand of this line of argument suggests that public agents, in competition for new industry, will lower taxes and other sources of costs to consumer-voters to such a point that public outputs will be provided at suboptimal levels.[392] In this scenario, Oates and Schwab conclude that a race to the bottom is likely to occur if capital is taxed at a positive rate, considering the optimal rate is zero.[393] On the other hand, a race to the top is expected when capital is taxed at inefficiently low rates.[394]

These authors make two distinct contributions with regard to economic competition among jurisdictions. First, "for jurisdictions homogeneous in workers, local choices under simple majority rule will be socially optimum; such jurisdictions select a zero tax rate on capital and set a standard for local environmental quality such that marginal willingness-to-pay equals the marginal social costs of a cleaner environment."[395] For this homogeneous group, "competition among jurisdiction is thus conductive to efficient outcomes."[396]

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[391] *See* Oates and Schwab, *supra* note 77, at 334.
[392] WALLACE E. OATES, FISCAL FEDERALISM 142-43 (1972).
[393] *Id.* at 408 ("Governments will view capital as being undersupplied because of the tax distortion, and they will possess incentives to lower environmental quality to inefficiently low levels to attract scarce resource.").
[394] Wilson, *supra* note 384, at 394-95, 403.
[395] *See* Oates and Schwab, *supra* note 380, at 333.
[396] *Id*. at 338-39 and n.10.

Second, "in cases where jurisdictions are not homogeneous or, where, for various reasons, they set a positive tax rate on capital, distortions arise not only in local fiscal decisions, but also in local environmental choices."[397] Thus, Oates and Schwab's investigation points at three different sources of potential distortion in local decision-making.[398] If the jurisdiction in competition for new industry and jobs does not have access to efficient tax instruments, distortions will occur in the fiscal and environmental decisions. Another potential distortion addresses the incompatibility of public decisions with the will of the consumer-voter, i.e the public choice problem. Finally, distortion in local decision-making will likely occur in the presence of conflicts of interest within a heterogeneous community.

Distortions in environmental decisions are expected to occur because, in competing for new businesses, states will lower their environmental standards to reduce costs of potential entrants.[399] This scenario allowed Cumberland to conclude that "local setting of standards for environmental quality would be subject to 'destructive interregional competition.'"[400] Accordingly, centralized governance at the central level is needed to avoid environmental degradation originated from local or state regulation.[401]

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[397] *Id.*
[398] *Id.* at 350-51.
[399] *See* Oates and Schwab, *supra* note 380, at 334.
[400] John H. Cumberland, *Interregional Pollution Spillovers and Consistency of Environmental Policy*, *in* REGIONAL ENVIRONMENTAL POLICY: THE ECONOMIC ISSUES 255-81 (H. Siebert et al. eds., 1979); *Efficiency and Equity in Interregional Environmental Management*, REV. OF REGIONAL STUD., No. 2, 1-9 (1981).
[401] *Id.*

A more recent study conducted by John Douglas Wilson[402] examines the theoretical literature on the race-to-the-bottom over environmental standards. Built on the premise that no race can occur if there are no constraints in tax instruments and the economy is free of distortions and competitive,[403] he concludes that the chances for a race-to-the-bottom to occur are at best mixed.[404] According to Wilson's reading of the local-public-economics literature, a race to the bottom "is not a generic feature of the system of independent governments. Models of a 'race' tend to be incomplete, because they fail to justify the absence of more direct means of attracting capital to a jurisdiction, most notably direct subsidies or at least reduced tax rates on capital. Other models give rise to the opposite problem, NIMBY, where environmental standards are inefficiently restrictive."[405]

Arik Levinson's contribution to environmental regulations and industry location concludes that despite "anecdotal evidence that political jurisdictions (national or sub-national) pass environmental laws with an eye toward attracting (or retaining) industry, there is no evidence that industry responds to differences in these laws in significant ways."[406] As for the relation between international environmental regulation and industrial flight, Levinson concludes that survey evidence does not support the claim that

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[402] *See* Wilson, *supra* note 384, at 393.
[403] *Id.* at 394.
[404] *Id.* at 396.
[405] *See id.* at 423-24.
[406] Arik Levinson, *Environmental Regulations and Industry Location: International and Domestic Evidence*, *in* 1 FAIR TRADE AND HARMONIZATION: PREREQUISITES FOR FREE TRADE? 430, 430 (Jagdish N. Bhagwati & Robert E. Hudec eds., 1996).

strict environmental standards gives rise to industrial flight, nor that lax environmental regulation creates pollution havens.[407] This conclusion is attributable to his findings that there is a large difference from what firms say they do in a survey to what they actually do in practice.[408] In addition, international studies on environmental regulation and competitiveness suffer from lack of information about relative environmental compliance costs and/or they rely on aggregate data.[409] As to the relation between US environmental regulation and industrial flight, Levinson contends that, just like the related international experience, it is difficult to find direct evidence of firms relocating within the country[410] or that environmental regulation affect investment to a degree that is statistically or economically relevant.[411] Finally, he offers three possible explanations for the discrepancy between the industrial flight rhetoric caused by lax environmental standards and the lack of economic evidence in that regard.[412] One explanation is that environmental regulation in developing countries promotes foreign direct investment, rather than deter it. Another is that large pollution-intensive industry exists in oligopolistic markets, where firms are not sensitive to competitive forces such as differences in environmental standards. Levinson also contends that:

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[407] *Id.* at 435.
[408] *Id.*
[409] *Id.* at 442.
[410] *Id.* at 443.
[411] Arik Levinson, *Environmental Regulations and Industry Location: International and Domestic Evidence*, *in* 1 FAIR TRADE AND HARMONIZATION: PREREQUISITES FOR FREE TRADE? (Jagdish N. Bhagwati & Robert E. Hudec eds., 1996) 450 ("[T]he literature as a whole presents fairly compelling evidence across a broad range of industries, time periods, and econometric specifications, that regulations do not matter to site choice.").
[412] *Id.* at 452.

> [P]oliticians receive support from many sources, including industry groups using pollution-intensive production processes. One convenient and credible way of justifying favorable treatment for these industries is to argue that regulations threaten their competitive position and that those industries might be forced to relocate.[413]

Alvin K. Klevorick argues that, regardless of whether the concern over the race to the bottom is justified or not, harmonization of environmental standards will not remedy the problems attributable to interjurisdictional competition.[414] He contends that the concerns behind criticism to the race to the bottom are not associated with interjurisdictional competition, but with the failure of individual states to achieve certain standards.[415] Klevorick presents six rationales for preferring diversity of standards, as opposed to harmonization/uniformity.[416] First, diversity of standards provides room for competitive advantages. Second, equilibrium may be reached efficiently in a context of diverse levels of legal and capital infrastructure. Third, in a model of tax competition, uniform tax rates are not generally required by governments to attain joint revenue maximization. Fourth, diversity of standards is associated with the collective uncertainty over the correct standard and the risk of imposing one single and possibly wrong standard on all jurisdictions. Fifth, "imposing a uniform standard diminishes the wealth of those countries that have the capacity – because either the technology they possess or their predilection – to do perfectly well with a lower standard."[417] Sixth, imposing uniformity

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[413] *Id.* at 453.
[414] *See* Alvin K. Klevorick, *Reflections on the Race to the Bottom*, *in* 1 FAIR TRADE AND HARMONIZATION: PREREQUISITES FOR FREE TRADE? 459 (Jagdish N. Bhagwati & Robert E. Hudec eds., 1996).
[415] *Id.* at 460.
[416] *Id.* at 464-66.
[417] *Id.* at 465.

of standards raises the potential problem of overlooking the fact that differences in standard setting may be based on differences in the values of different populations, i.e. a moral philosophy problem.

B. Legal Implications of the Regulatory Competition Theory for the Environment

Regulatory competition has generated a significant amount of legal scholarship in different areas of the law.[418] As in the debate among economists, legal scholars have not reached a consensus as to the effects of regulatory competition. As for environmental regulation, there is no agreement among those who contend that centralized regulation

[418] For vigorous discussions on regulatory competition in law, see HORATIA MUIR WATT, *Aspects Économiques du Droit International Privé, in* RECUEIL DES COURS: COLLECTED COURSES OF THE HAGUE ACADEMY OF INTERNATIONAL LAW 39 (2005); WILLIAM BRATTON ET. AL, INTERNATIONAL REGULATORY COMPETITION AND COORDINATION (1996); GEORGE A. BERMANN ET AL., TRANSATLANTIC REGULATORY COOPERATION (2000); DANIEL C. ESTY & DAMIEN GERADIN, REGULATORY COMPETITION AND ECONOMIC INTEGRATION (2001); George A. Bermann, *Regulatory Federalism: A Reprise and Introduction*, 2 COLUM. J. EUR. L. 395 (1996); Symposium, *Regulatory Competition in Focus*, 3 J. OF INT'L ECON. L. 215 (2000); Roberta Romano, *The Need for Competition in International Securities Regulation*, 2 THEORETICAL INQUIRIES L. 387 (2001); Frederick Tung, *Passports, Private Choice, and Private Interests: Regulatory Competition and Cooperation* in *Corporate, Securities, and Bankruptcy Law*, 3 CHI. J. INT'L L. 369 (2002); Andrew T. Guzman, *Is International Antitrust Possible?*, 73 N.Y.U. L. REV. 1501 (1998); Andrew T. Guzman, *Introduction – International Regulatory Harmonization*, 3 CHI. J. INT'L L. 271 (2002); Andrew T. Guzman, *Antitrust and International Regulatory Federalism*, 76 N.Y.U. L. REV. 1142 (2001); Andrew T. Guzman, *Public Choice and International Regulatory Competition*, 90 GEO. L. J. 971 (2002); David Charny, *Competition Among Jurisdictions in Formulating Corporate Law Rules: American Perspective on the "Race to the Bottom" In European Communities*, 32 HARV. INT'L L. J. 423 (1991); Joel P. Trachtman, *International Regulatory Competition, Externalization, and Jurisdiction*, 34 HARV. INT'L L. J. 47 (1993); Michael Abramowicz, *Speeding Up the Crawl to the Top*, 20 YALE J. on REG. 139 (2003); Kal Raustiala, *Compliance & Effectiveness in International Regulatory Cooperation*, 32 CASE W. RES. J. INT'L L. 387 (2000); Damien Geradin, *Competition Between Rules and Rules of Competition: A Legal and Economic Analysis of the Proposed Modernization of the Enforcement of EC Competition Law*, 9 COLUM. J. EUR. L. 1 (2002).

will avoid environmental degradation[419] and those who state that the race to the bottom[420] argument has no support in existing models of interjurisdictional competition.[421]

1. First-Generation Thinking:[422] State environmental regulation decreases social welfare

Professor Richard Stewart summarizes the argument in favor of centralized environmental decision-making in four rationales:[423] the tragedy of the commons and national economies of scale,[424] disparities in effective representation, spillovers, and moral ideals and the politics of sacrifice.

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[419] The most representative scholarship of this argument was developed by Professor Richard B. Stewart. *See* Richard B. Stewart, *Pyramids of Sacrifice? Problems of Federalism in Mandating State Implementation of National Environmental Policy*, 86 YALE L. J. 1196 (1977) [hereinafter *Pyramids of Sacrifice*]; Richard B. Stewart, *The Development of Administrative and Quasi-Constitutional Law in Judicial Review of Environmental Decision-making: Lessons from the Clean Air Act*, 62 IOWA L. REV. 713 (1977).

[420] Race-to-the-bottom "is a race from the desirable levels of environmental quality that states would pursue if they did not face competition for industry to the increasingly undesirable levels that they choose in the face of such competition." Richard L. Revesz, *Rehabilitating Interstate Competition: Rethinking the "Race-to-the-bottom" Rationale for Federal Environmental Regulation*, 67 N.Y.U. L. REV. 1210 (1992) [hereinafter *Rehabilitating Interstate Competition*].

[421] Professor Richard L. Revesz is the best account of this line of argument. *See id.* at 1210, 1211-12 (arguing that "competition among states for industry should not be expected to lead to a race that decreases social welfare; indeed, as in other areas, such competition can be expected to produce efficient allocation of industrial activity among states.").

[422] The term is coined by Daniel Esty. *See* Daniel C. Esty, *Revitalizing Environmental Federalism*, 95 MICH. L. REV. 570, 600 (1996).

[423] *See* Stewart, *Pyramids of Sacrifice*, *supra* note 419, at 1211.

[424] Economies of scale are defined as "a situation in which a firm can increase its output more than proportionally to its total input cost." *See* EDGAR K. BROWNING & MARK A. ZUPAN, MICROECONOMICS: THEORY & APPLICATION 208 (7th ed. 2001).

The tragedy of the commons rationale arises in an interjurisdictional competition structure where public decisions, adopted by self-interested bureaucrats leave all bureaucrats worse off than they would have been had they adopted policies formulated collectively.[425] Besides environmental quality, constituents also value employment and economic growth.[426] Stringent environmental standards of one community against lax environmental standards of others may drive businesses and jobs away of the former to the latter. In the name of employment and economic growth, communities with high environmental standards may decide to lower their demands for environmental quality in an attempt to attract or hold industry, leading to the creation of jobs, and consequently increases in wages and taxes.[427] Similar moves in neighboring communities will lead to a race to the bottom in environmental regulation, in the name of jobs and economic development.[428] Stewart argues that the race to the bottom argument would be corrected by the imposition of nationwide stringent environmental standards.[429] Moreover, economies of scale benefits would justify centralized environmental decision-making for data collection and analysis, and other technical issues.[430]

The second rationale listed by Stewart for preferring environmental decision-making at the national level relates to claims of disparities in effective environmental

[425] Stewart, *Pyramids of Sacrifice*, *supra* note 419, at 1211.
[426] *Id.*
[427] *See* Revesz, *Rehabilitating Interstate Competition*, *supra* note 420, at 1215.
[428] Stewart, *Pyramids of Sacrifice*, *supra* note 419, at 1212.
[429] *Id.*
[430] *Id.*

groups' representation vis-à-vis industry and unions.[431] Stewart's central contention is that environmental groups have a greater impact on policy decisions taken at the national level, for environmental groups are weakly represented locally and transaction costs for concerted action are exacerbated by technical complexities of environmental issues.[432] These comparative disadvantages will often be reduced, however, if decisions are taken at the national level, because aggregate costs will be reduced and critical mass will be achieved. Moreover, centralized environmental decision-making affords scale economies in fundraising and greater political support from Washington bureaucrats.[433]

Interstate spillovers/externalities appear as the third rationale for centralized environmental decision-making.[434] Stewart contends that physical, psychic or economic spillovers are associated with the regulatory model based on decision-making at the state or local level. Provided that the methods available to the states involved to correct these distortions have proven ineffective under state regulation, federal intervention appears as the best form of eliminating the more problematic types of spillovers.[435]

The fourth rationale in favor of centralization of environmental decision-making is related to moral ideals and the politics of sacrifice,[436] which, in the words of Stewart, "reflects the sacrifice of preference-satisfaction in order to fulfill duties to others, or to

[431] *Id*. at 1213.
[432] *Id.*
[433] Stewart, *Pyramids of Sacrifice*, *supra* note 419, at 1213-14.
[434] *Id.* at 1215.
[435] *Id.* at 1216.
[436] *Id.* at 1217.

transform existing preference structures in the direction of lessened dependence upon consumption of material goods and greater harmony with the natural environment."[437] In other words, Stewart's sacrifice is translated into renunciation of maximum economic growth to preserve and promote non-economic goals, such as the life and health of plants and animals for future generations. These objectives, however, cannot be achieved under a model of state regulation. States will find it harder to undertake sacrifices if competing jurisdictions do not.[438] Furthermore, sacrifices undertaken in response to a national measure will dilute the costs in local expenditures.[439] In addition, public reaction against measures taken pursuant environmental objectives will have less of an impact on Washington bureaucrats than at the local/state level, making it harder for states to abandon it.[440] Finally, in the face of public choice concerns,[441] it is assumed that groups seeking higher levels of environmental protection are more effective at the federal level than at the state/local level, which leads to the conclusion that federal regulation is arguably more protective of the environment.[442]

But if the arguments in favor of nationally decided environmental standards raised by Stewart seem convincing, it should not go without saying that they are not free of criticism, as readily offered by Stewart himself[443] and other influential legal scholars.

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[437] *Id.*
[438] Stewart, *Pyramids of Sacrifice*, *supra* note 419, at 1217.
[439] *Id.* at 1218.
[440] *Id.*
[441] *See infra* p. 90.
[442] Revesz, *Rehabilitating Interstate Competition*, *supra* note 420, at 1223.
[443] *See* Stewart, *Pyramids of Sacrifice*, *supra* note 116, at 1219-22.

2. Second-Generation Thinking:[444] State environmental regulation increases social welfare

Stewart identifies several potential sources of local resistance to national environmental policies: diseconomies of scale,[445] impairment of self-determination, and national ideals as "Pyramids/politics of Sacrifice." Esty addresses arguments related to the benefits of diversity, public choice, and transboundary pollution spillovers.[446] Finally, Revesz challenges race-to-the-bottom fears, and argues that interjurisdictional competition produces efficient environmental decision-making and enhances social welfare.[447]

The diseconomies of scale argument arise whenever the costs to the state government in implementing and complying with a particular environmental policy are higher than the benefits perceived by them. It is typical of a federal regulatory authority to implement uniform standards across the federal states. In developing a uniform environmental policy designed to correct interstate externalities, it is not surprising that some states will end up bearing greater costs than benefits associated with such a policy.

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[444] *See* Esty, *Revitalizing Environmental Federalism*, *supra* note 422, at 605.
[445] Diseconomies of scale are defined as "a situation in which a firm's output increases less than proportionally to its total input costs." *See* BROWNING & ZUPAN, *supra* note 121, at 208.
[446] *See* Esty, *Revitalizing Environmental Federalism*, *supra* note 422, at 605.
[447] Revesz, *Rehabilitating Interstate Competition*, *supra* note 420, at 1244.

Even if total gains of the policy compensate total costs, some states will not be motivated to enforce the policy that entails greater local burdens than benefits.[448]

While recognizing that environmental interests are likely to have greater policy impact if shifted from states to the federal government, Stewart acknowledges that this is only possible at the expense of the impairment of state-determination.[449] Problems arise whenever decisions about environmental quality have notable impacts on other sectors of the economy that touch state citizens' interests directly.[450] Moreover, federal environmental measures decrease local participation considerably.[451]

Stewart's idealized "Pyramids/politics of Sacrifice" is likely to find shortcomings, which may well compromise the enforcement of national environmental measures.[452] To some, the sacrifices undertaken in the name of a federal environmental policy may be excessive as the case when the poor face increased utility bills.[453] In the words of Stewart, "[r]esistance and resentment may be heightened by the fact that many environmental programs distribute the costs of controls in a regressive pattern while providing disproportionate benefits for the educated and wealthy, who can better afford to indulge an acquired taste for environmental quality than the poor, who have more

[448] *See* Stewart, *Pyramids of Sacrifice*, *supra* note 419, at 1220.
[449] *Id.*
[450] *Id.*
[451] *Id.*
[452] *Id.* at 1221.
[453] Stewart, *Pyramids of Sacrifice*, *supra* note 419, at 1221.

pressing needs and fewer resources with which to satisfy them."[454] Even more problematic, perhaps, is Stewart's flawed presumption that it is moral for the federal government to force people to pay for goods they don't want.[455]

Daniel Esty summarizes additional arguments in favor of decentralized environmental policy making: benefits of diversity, public choice and transboundary pollution spillovers. First and foremost, decentralized regulatory decision-making encourages diversity in environmental regulation, which has two main advantages: from the standpoint of economics, diversity of environmental background conditions, emissions levels, risk preferences, climate, policy priorities, income levels and weather, accompanied by regulation that takes these differences into account, increases social welfare.[456] From much of the legal and political standpoint, regulatory diversity across states or localities encourages policy innovation, as each state or locality is a different "laboratory" for public policies.[457]

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[454] *See id.*
[455] *See* Henry N. Butler & Jonathan R. Macey, *Externalities and the Matching Principle: The Case for Reallocating Environmental Regulatory Authority*, Symposium, *Constructing a New Federalism*, YALE J. on REG. & YALE L. & POL'Y. REV. (1996).
[456] *See* Esty, *Revitalizing Environmental Federalism*, *supra* note 422, at 606-07.
[457] *Id.* at 606.

Furthermore, Esty notes, theorists who contend that decentralized environmental regulation is welfare increasing quite often base their claim on the theory of public choice or interest group:[458]

> In the economists' version of the interest-group theory of government, legislation is supplied to groups or coalitions that outbid rival seekers of favorable legislation. The price that the winning group bids is determined both by the value of legislative protection to the group's members and the group's ability to overcome free-rider problems that plague coalitions. Payments take the form of campaign contributions, votes, implicit promises of future favors, and sometimes outright bribes. In short, legislation is 'sold' by the legislature and 'bought' by the beneficiaries of the legislation.[459]

Theorists argue that decisions taken at higher and more remote levels of regulation tend to be less representative of constituents' will than policies scrutinized locally.[460] In addition, it is argued that "rent-seeking"[461] efforts are greater at the federal, rather than at the state regulatory level.[462] In other words, instead of federal regulation correcting distortions in disparities of political power representation between environmental groups and industry's interest; quite the contrary, it only works to augment it.

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[458] I rely on Dennis Mueller's definition of public choice as "the economic study of nonmarket decision making, or simply the application of economics to political science." *See* DENNIS MUELLER, PUBLIC CHOICE II 1 (1989); DANIEL A. FARBER & PHILIP P. FRICKEY, LAW AND PUBLIC CHOICE: A CRITICAL INTRODUCTION 7 (1991).

[459] *See* Richard Posner, *Theories of Economic Regulation*, 5 BELL. J. ECON. & MGMT. SCI. 335 (1974); FARBER & FRICKEY, *supra* note 458, at 15.

[460] *See* Esty, *Revitalizing Environmental Federalism*, *supra* note 422, at 609-10.

[461] "Rent-seeking refers to the attempt to obtain economic rents (i.e., payments for the use of an economic asset in excess of the market price) through government intervention in the market." *See* Jonathan R. Macey, *Promoting Public-Regarding Legislation Through Statutory Interpretation: An Interest Group Model*, 86 COLUM. L. REV. 223, 224 n.6 (1986).

[462] *See* Esty, *Revitalizing Environmental Federalism*, *supra* note 422, at 610.

Esty also remarks that the relation between interstate pollution spillovers and federal regulation takes two different strands in the second-generation thinking. On the one hand, one line of thought acknowledges the existence of interjurisdictional externalities, but proceeds with policy prescriptions that does not address these externalities.[463] On the other, theorists contend that interstate pollution spillovers should not require governmental attention, because "[a]lthough externalities or other failures may arise, […] the capacity of government to regulate effectively is so limited that welfare losses are minimized by letting unregulated forces operate" (the Nirvana Fallacy).[464]

In a highly influential article that best represents second-generation thinking, Professor Richard Revesz challenges the settled understanding that interjurisdictional competition will lead states to a race to the bottom in environmental standards in an attempt to attract and retain industry.[465] Revesz claims that race-to-the-bottom arguments

[463] *Id.* at 612.
[464] *Id.* at 612-13. Note, however, that the Nirvana Fallacy argument is not a claim against federal governmental regulation, but a claim against governmental regulation altogether, grounded on the assumption that governments are ill equipped to design and implement regulatory policies that respond to market failures in a manner that increases social welfare.
[465] Revesz, *Rehabilitating Interstate Competition*, *supra* note 117, at 1211-12. *See generally* Richard L. Revesz, *The Race to the Bottom and Federal Environmental Regulation: A Response to Critics*, 82 MINN. L. REV. 535 (1997); Richard L. Revesz, *Federalism and Environmental Regulation: A Normative Critique*, *in* THE NEW FEDERALISM: CAN THE STATES BE TRUSTED? 97 (John Ferejohn & Barry R. Weingast eds., 1997); Richard L. Revesz, *Federalism and Environmental Regulation: Lessons for the European Union and the International Community*, 83 VA. L. REV. 1331 (1997). *See also* Richard L. Revesz, *Federalism and Interstate Environmental Externalities*, 144 U. PA. L. REV. 2341 (1996) (criticizing the manner in which the federal environmental statutes have dealt with the problem of interstate externalities). *But see* Kirsten H. Engle, *State Environmental Standard-Setting: Is There a "Race" and Is It "to the Bottom"?*, 48

find no support in existing models of interjurisdictional competition, and that, on the contrary, state competition for industry can, indeed, produce an efficient allocation of industrial activity.[466] By comparing interstate competition for industrial activity with markets for traditional goods, Revesz finds no basis for the claim that the former will result in a competition that decreases welfare.[467] Finally, Revesz contends that federal regulation aimed at correcting a race-to-the-bottom over environmental standards is likely to create distortions elsewhere, by relaxing regulatory controls in other areas.[468] In other words, even if the contention that state regulation favors a race-to-the-bottom in environmental standards holds true, federal regulation will have negative effects on other state regulatory matters (such as worker safety and minimum wage laws)[469] or fiscal interests.[470] Perhaps more problematic to a federal system are Revesz findings that the logic behind federal environmental regulation is a direct attack to the concept of federalism.[471]

HASTINGS L. J. 271 (1997); Joshua D. Sarnoff, *The Continuing Imperative (But Only from a National Perspective) for Federal Environmental Protection*, 7 DUKE ENVLT. L. & POL'Y F. 225 (1997); Peter P. Swire, *The Race to Laxity and the Race to Undesirability: Explaining Failures in Competition Among Jurisdiction in Environmental Law*, 14 YALE J. on REG. 67 (1996).

[466] Revesz, *Rehabilitating Interstate Competition*, *supra* note 420, at 1211-12.

[467] *Id*. at 1234.

[468] *Id.* at 1212.

[469] Esty, *Revitalizing Environmental Federalism*, *supra* note 422, at 653 n.144.

[470] Revesz, *Rehabilitating Interstate Competition*, *supra* note 420, at 1245.

[471] *Id.*

3. Third-Generation Thinking:[472] Multi-Tier Environmental Regulation

More recently, Professor Daniel Esty has challenged the presumption that decentralized approaches to environmental policy are more welfare enhancing than centralized regulatory efforts.[473] However, his contribution is not intended to be a new defense of environmental policy decided at the federal level; it is intended to be a "break with unidirectional conclusions about the proper governmental level of environmental policymaking."[474]

Esty's study addresses three fundamental questions concerning decentralized environmental policy:[475] which governmental level best resolves technical issues (the technical argument), whether a more decentralized regulatory approach will ameliorate or aggravate the structural impediments to achieving least-social-cost environmental policies (the structural question), and whether public choice problems associated with environmental policymaking are reduced or worsened by decentralization.

The analysis of the question of which regulatory approach best addresses technical environmental problems does not support the supposedly settled second-generation decentralized regulation claim. In order to address this question, Esty breaks

[472] *See generally* Esty, *Revitalizing Environmental Federalism*, *supra* note 422.
[473] *See id.* at 570 (arguing for a multi-tier regulatory structure to tackle the complexity and diversity of environmental problems).
[474] *Id*. at 571.
[475] *Id*. at 613.

the analysis into four instances: problem identification,[476] data collection and analysis,[477] policy design,[478] and implementation, enforcement, and policy evaluation.[479] According to Esty, identification of risks and harms to the environment can benefit both from centralized and decentralized regulation, depending on the problem at hand.[480] Some problems are peculiar to certain localities, which economically may not justify having observers all over the country. However, other environmental problems may benefit from nation-wide purview, such as the case of identifying chlorine compounds (CFCs) that deplete the ozone layer.[481] Furthermore, economies of scale may justify data collection and analysis at the federal level.[482] For example, decentralized jurisdictions will likely conduct the same studies several times and will spend time agreeing on an efficient division of technical labor.[483] Poor jurisdictions may lack the capacity to conduct reliable data collection and analysis.[484] Esty also suggests that environmental policies designed nationally, implemented locally and following nonuniform standards are the best alternative to address welfare-reducing races to the bottom or top and risks of structural failures from interstate externalities.[485] Finally, as a general rule, Esty states that

[476] *Id.* at 614.
[477] *Id.*
[478] Esty, *Revitalizing Environmental Federalism*, *supra* note 422, at 618.
[479] *Id.* at 623.
[480] *Id.* at 614.
[481] *Id.*
[482] However, one may not forget that the benefits of diversity (state-as-laboratories argument) may downplay the power of the argument in favor of centralized data collection and analysis. This is arguably the case when states are able to identify more effective policy tools, when the competition generated among decentralized jurisdictions is welfare-increasing, and when the particular environmental problem is geographically heterogeneous. *Id.* at 614-17.
[483] *See* Esty, *Revitalizing Environmental Federalism*, *supra* note 422, at 614-15.
[484] *Id.* at 615.
[485] *Id.* at 619.

implementation and enforcement of environmental measures are done best on a decentralized regulatory level, while policy evaluation is perceived to benefit from centralized regulation.[486]

Esty also addresses whether a more decentralized regulatory approach will ameliorate or aggravate the structural impediments to achieving least-social-cost environmental policies (the structural question). Esty concludes that structural problems are better dealt with a hybrid regulatory system.[487] Accordingly, "problems that are by-and-large local in scope (waste site cleanups, drinking water quality, and spending on playgrounds, for example) should be regulated at the local level. Problems that arise on regional scale (controlling pollution in a river system or an airshed, for example) should be managed on an ecosystem basis across states or even countries when necessary."[488] This structural question was analyzed under three different perspectives: physical externalities;[489] economic externalities;[490] and psychic externalities, internalities, and the choice of public.[491]

Decentralization of environmental regulation is grounded on the assumption that physical externalities are not worthy of attention.[492] However, scientific evidence has

[486] *Id.*at 623-24.
[487] *Id.* at 647.
[488] *See* Esty, *Revitalizing Environmental Federalism*, *supra* note 422, at 648.
[489] *See id.* at 625-27.
[490] *Id.* at 627-38.
[491] *Id.* at 638-48.
[492] *Id.* at 625.

pointed to the contrary direction, showing various instances where pollution spillovers occur and decentralized environmental policies do very little to correct them.[493] The immediate question turns not on whether centralized regulation is required, but on what form of centralization is needed.

The economic externalities referred by Esty relate to the "race to the bottom" problem in environmental regulation, which is the fear that states/countries in competition for firms will lower their environmental standards to suboptimal levels in an attempt to attract or retain firms. Second-generation theorists consider that the fear of a race to the bottom in environmental regulation is unwarranted from a social welfare perspective.[494] Esty, on the other hand, concludes that "the scope for failure in the market for environmental-policy-determined location rights is significant enough to make untenable a presumption that regulatory competition in this domain will be welfare enhancing."[495] He asserts that "environmental regulation operates in a realm where quantitative welfare comparisons are difficult"[496] and contends that "politicians do not make environmental policy choices by equating the marginal costs and marginal benefits of lowering standards to gain a factory or to avoid losing one."[497] Esty also maintains that "governmental bodies are relatively weak instruments of market discipline."[498]

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[493] This is the case of spillovers of DDT, SO2 and acid rain, heavy metals, and bioaccumulative toxics. *See* Esty, *Revitalizing Environmental Federalism*, *supra* note 422, at 625.
[494] *See id.* at 628.
[495] *Id.* at 634.
[496] *Id.* at 631-32.
[497] *Id.* at 632.
[498] *See* Esty, *Revitalizing Environmental Federalism*, *supra* note 422, at 633.

With regard to the choice of public, Esty notes that "a presumption in favor of decentralized environmental regulation cannot be justified because it prejudges the critical question of the relevant political community vis-à-vis the environmental problem at hand."[499] The sense of community in environmental regulation does not necessarily fit into the political subdivision (state/country) most closely connected to a given environmental policy. Needless to say environmental damages that take place in the Amazon, for instance, are everyone's concern, and not only to the concern of Brazilians. However, there are cases in which no harm is inflicted on a given community, even though they claim to have a legitimate interest into another country's environment.[500] Esty concludes that "the current devolutionary mood ignores this complex interdependence[,] [p]utt[ing] at risk some of the important benefits that accrue from having a broader political identity."[501]

The last question addressed by Esty is whether public choice problems associated with environmental policymaking are reduced or worsened by decentralization. In this regard, Esty finds no legitimate grounds to suspect that public choice problems would be accentuated by environmental regulation at the central level, and he notes that the

[499] *See id.* at 647.
[500] *See supra* the Tuna-Dolphin I dispute, Chapter I.
[501] *See* Esty, *Revitalizing Environmental Federalism*, *supra* note 422, at 643.

opposite could be concluded provided that the media devotes much more attention to federal-level activities.[502]

C. Lessons WTO and MERCOSUR Tribunals Should Learn from Regulatory Competition Theory in Trade and Environment Disputes

The previous sections have demonstrated that there are advantages and drawbacks to a regulatory approach based on harmonization. According to scholars that defend an approach to environmental regulation based on harmonization, this form of regulating the environment prevents races to the bottom in environmental regulation. In other words, in order to attract and retain industries, states may bring their environmental standards to very low levels. Through harmonization, however, states are restrained from lowering their environmental standards below a minimum level. In addition, harmonization is an effective approach for resolving technical issues, such as data collection and analysis. Moreover, scholars argue that harmonization corrects the problems faced by disparities in effective representation. It is believed that environmental groups are weakly represented in the state and local levels and that this problem would be addressed by bringing environmental decision-making to the central government, where environmental groups have greater policy impact. Defenders of harmonization of environmental standards also contend that this approach avoids negative environmental externalities, such as pollution,

[502] *Id.* at 650.

because every state is under the same or similar environmental standards, avoiding that some states pollute more and transfer its costs to its neighbors.

Defenders of regulatory competition, on the other hand, contend that there are significant welfare gains to be derived from allowing states to adopt different environmental regulations. They contradict the assumptions related to the race to the bottom, disparities in effective representation and interstate externalities. In addition, regulatory competition scholars argue that allowing states to choose their preferred levels of environmental protection contributes to policy innovation to best address environmental problems. Such benefits of regulatory diversity go unnoticed under a mandatory harmonization approach.

Finally, Professor Esty contends that the appropriate level of environmental decision-making depends on several factors, and that more welfare gains would accrue from a hybrid regulatory approach that relies on harmonization. While he believes that environmental policies are best designed nationally, he argues that implementation and enforcement of such policies are done best at the state level. Moreover, Esty also showed that an approach that combines harmonization and regulatory competition will be welfare-increasing for issues involving externalities and the choice of public. In conclusion, Esty's contribution stands for the claim that the environment could gain from an approach that will depend on the particular problem at hand.

Although Esty's conclusions were developed in the context of US environmental policy, I argue that several lessons can be drawn from this literature with a direct impact on trade-environment disputes. The most important lesson of this literature is that the appropriate level of environmental regulation will depend on the environmental problem or risk that a governmental wishes to regulate. Any other division is superficial and does not take into account the complexity of environmental regulation.

As in the US case of environmental regulation, where Professor Esty concluded that the level of environmental decision-making will depend on technical and structural issues, the appropriate level of deference to regulatory authorities in WTO and MERCOSUR trade-environment disputes will also depend on factors that include impact on trade, extent of risks to the environment, availability of less-trade restrictive measures, domestic politics behind the measure, and the relative strength of WTO and MERCOSUR institutions.

WTO and MERCOSUR trade tribunals should first identify the actual economic impact of the trade-restrictive measure. An approach based on the sole assumption that unrestricted trade is always good for the environment should be rejected. There are trade-environment disputes, as I will show in the next Chapter, where the impact on trade is minimal. Under my suggested approach, the specific impact on trade, balanced with the remaining factors will determine the appropriate level of environmental decision-making, and thus the appropriate level of deference to regulatory authorities.

Second, every MERCOSUR and WTO trade tribunal should evaluate the extent of the environmental risks and harm that are posed by imports of a certain product. It would not be desirable to permit import bans on products that impose little risk and harm to the environment. Therefore, WTO and MERCOSUR trade tribunals should conduct in-depth investigations of such environmental risks and harm before rejecting claims brought under Article XX (b) or (g) of GATT or Article 50(d) on the 1980 Montevideo Treaty.

In addition, in order to preserve trade (even if minimal) and to protect the environment, MERCOSUR and WTO trade tribunals should identify whether there are other less trade-restrictive forms of avoiding or eliminating certain environmental risks. Especially with relation to developing countries, trade tribunals should determine whether alternative measures are readily available, economically feasible, and environmentally effective.

On the other hand, trade-environment disputes should look ahead of the actual impacts on trade and environment and focus on the politics of each dispute and the capacity of WTO and MERCOSUR institutions to address problems present in trade-environment conflicts.

The politics behind every trade-environment dispute is important because there could be cases where the governmental authorities are captured by domestic economic

interests. Identification of these political matters is crucial to every trade-environment conflict. WTO and MERCOSUR trade tribunals should not jeopardize the legitimacy of their decisions by making decisions that overlook this very important aspect of trade-environment disputes.

The final step of my suggested approach indicates that trade tribunals must take into account the relative weakness of WTO and MERCOSUR institutions, and the potential threat that its decision could pose to continued political support for these institutions. In other words, WTO and MERCOSUR trade tribunals will be asked to consider to what extent their decisions on trade and environment disputes are strengthening or weakening political support for these organizations.

In addition, Professor Esty concluded that a unidirectional harmonized central approach to environmental regulation in the US is welfare-decreasing, and that great weight should be put on a hybrid regulatory system. Similarly, WTO and MERCOSUR panels should question the usual assumption that unharmonized regulatory measures are always bad for trade. As I will demonstrate in the next Chapter, an approach that properly balances economic and environmental interests may actually increase support for WTO and MERCOSUR institutions.

In conclusion, borrowing from the analysis on regulatory competition in the US environmental context, my suggested analysis indicates that the appropriate deference to

national regulatory authorities will depend on specific economic, environmental, political and institutional considerations.

D. Summary

This chapter has demonstrated that a similar interpretation pattern concerning regulation and its effects on the environment exists both among economists and lawyers. This consensus is divided into two main schools of thought. One school of thought concludes that interjurisdictional competition compels public agents to make efficient decisions that are welfare increasing. Another school of thought contends that diversity in environmental standards will not maximize welfare and will instead cause races to the bottom in environmental regulation. Under this approach, harmonization of environmental regulation will remedy the problems attributable to interjurisdictional competition. A third sub-theory, led by Professor Esty, appears in the legal scholarship to contend that there isn't such thing as a one-size-fits-all regulatory approach to environmental policymaking and concludes that technical and structural matters will dictate the proper governmental approach. According to this sub-theory, it is often the case that a combination of interjurisdictional competition and harmonization creates the most efficient environmental decision-making structure.

In Section C, I argued that the latest scholarship on regulatory competition theory holds important lessons for WTO and MERCOSUR panels addressing trade-environment

disputes. These panels need to go beyond the reflexive assumption that increased trade will always further environmental protection. Professor Esty concluded that the appropriate level of environmental protection will actually depend on the technical and structural issues involved in a particular environmental harm or risk. Similarly, I argued that the appropriate level of deference to regulatory authorities will depend on specific economic, environmental, political, and institutional considerations. As I demonstrate in the next Chapter, the WTO and MERCOSUR trade panels in the retreaded tires dispute might have reached a different conclusion had they adopted my suggested approach.

Chapter VI. Applying the Lessons of Regulatory Competition to the Retreaded Tires Dispute

In Chapters III and IV, I have showed that the MERCOSUR and WTO tribunals found the Brazilian and Argentinean import bans to be restrictive and discriminatory without analyzing the actual trade impact of the measures, and that both panels gave little weight to the environmental risks involved. I also showed that neither tribunal analyzed the specific political obstacles that such alternative measures pose for developing countries such as Argentina and Brazil,[503] the capacity of WTO and MERCOSUR institutions to address environmental issues, or the potential threat that their decisions could pose to continued political support for these institutions. In Chapter V, I showed that this type of specific analysis is key to arrive at an appropriate resolution of trade-environment disputes.

In this Chapter, I will attempt to provide the specific analysis missing from the WTO and MERCOSUR reports. In Section A, I discuss the economic impact of the Brazilian import ban on the Brazilian and EU tire industries. Section B addresses the extent and certainty of environmental risks associated with retreaded tires. Section C assesses the availability of less-trade restrictive means for achieving Brazil's policy of reducing additional generation of waste tire. Section D deals with the politics of tire

[503] Interview with Dr. Hermes Marcelo Huck, MERCOSUR trade panelist in the retreaded tire dispute between Uruguay and Argentina, in São Paulo, Brazil (Mar. 10, 2006).

regulation in Brazil. Section E explains the weakness of MERCOSUR institutions and the impact of the tire decision on political support for these institutions. In Section F, I summarize the results of each section and explain why, taken together, they suggest that the WTO and MERCOSUR decisions were wrongly decided.

A. Trade Aspects of the Retreaded Tires Dispute

As discussed in Chapters III and IV, the WTO and MERCOSUR tribunals in the retreaded tire dispute did not conduct any measurement of the economic impact of Argentina's trade measures.[504] Had they engaged in this analysis, however, they would have seen that the trade impact in both cases was relatively small.

Prior to the imposition of the Brazilian ban on imports of retreaded tires, Brazil had been an important market for European Union's retreaders, representing approximately 20 percent of their export market.[505] As shown in Table 7, exports had been growing considerably year after year until the import ban was imposed.

[504] Interview with Dr. Hermes Marcelo Huck, MERCOSUR trade panelist in the retreaded tire dispute between Uruguay and Argentina, in São Paulo, Brazil (Mar. 10, 2006).
[505] Report from the Directorate-General for Trade of the European Commission on the Examination Procedure Concerning an Obstacle to Trade within the Meaning of Council Regulation (EC) No 3286/94 consisting of Trade Practices Maintained by Brazil Affecting Trade in Retreaded Tires, to the Trade Barriers Regulation Committee (Sept. 13, 2004) (on file with author).

Table 7: Imports of retreaded and used tires by unity

Year	Used Tires Unity NCM 4012.20.00	Retreaded Tires Unity NCM 4012.10.00
1996	6.149.537	970.136
1997	1.683.020	2.248.153
1998	911.237	3.334.362
1999	1.207.100	2.022.912
2000	1.407.618	2.002.578
2001	2.396.898	896.764
2002	2.659.704	32.491
2003	4.240.474	0
2004	7.564.360	0
2005	10.478.466	0
TOTAL	**16.412.014**	**11.317.581**

Memorandum from the Ministry of Environment's Ad Hoc Committee Concerning Trade Practices Maintained by Brazil Affecting Trade in Retreaded Tires, to the Ministry of Foreign Affairs (Mar. 20, 2006) (on file with author).

Table 7 shows that in 2000, Brazil imported 2.022,578 unities of retreaded tires. That number steadily dropped to 896,764 in 2001. This decrease in the number of unities of retreaded tires exported to Brazil is attributable to the 2000 ban on imported retreaded tires that prohibits the issuance of import licenses. However, with regard to used tires, the numbers in Table 1 indicate a continuous growth of Brazilian imports since 1999, despite the 1991 import ban on used goods.

The retreaded tire industry of the European Union, under normal conditions, had anticipated a growth in the number of retreaded tires to be exported to Brazil that would reach 3 million by the end of 2003.[506] Between 1995 and 2000, the number of retreaded tires exported from the European Communities to Brazil increased in approximately 58

[506] *Id.*

percent, and, for the first time in six years, it fell to 32 percent in 2001, after the introduction of the import restriction.[507] In 2002 and 2003 exports continued to fall, reaching approximately 10 percent of the export volume of previous years.[508] Despite the ban on retreaded tires, exports remained due either to still valid import licenses, deficiencies in the customs information system, or to successful judicial claims brought by exporters before Brazilian courts.

Between 1998 and 1999, the volume of retreaded tires exported from the European Union to Brazil decreased by 30 percent, while imports of used tires increased in exact the same proportion.[509] This data, therefore, suggest that consumption in Brazil's domestic market was stable and sustains the European thesis that the European Union's retreaded tires exporters had sufficient reasons to believe in their expected increase of the Brazilian market share.[510] Moreover, the European Union advanced that their expected growth in the demand for their tires found support in the following factors.[511] First, that demand for European Union's retreaded tires increased again from 1999 to 2000. Second, that there is a continuous demand for retreaded tires in Brazil, in light of price disparities between retreaded and new tires and given the growing demand for imports of used tires as raw material for domestic manufactures of retreaded tires.

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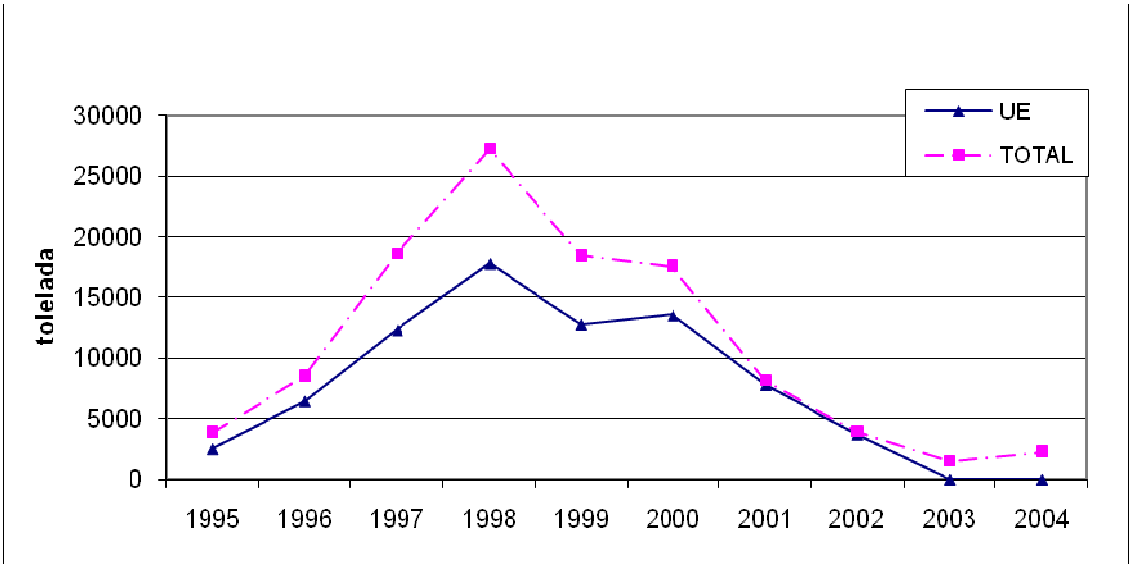
[507] *Id.*
[508] *Id.*
[509] Report from the Directorate-General for Trade of the European Commission on the Examination Procedure concerning an Obstacle to Trade within the Meaning of Council Regulation (EC) No 3286/94 consisting of Trade Practices Maintained by Brazil Affecting Trade in Retreaded Tires, to the Trade Barriers Regulation Committee (Sept. 13, 2004) (on file with author).
[510] *Id.*
[511] *Id.*

Graph 2: Brazil's Imports of Retreaded Tires



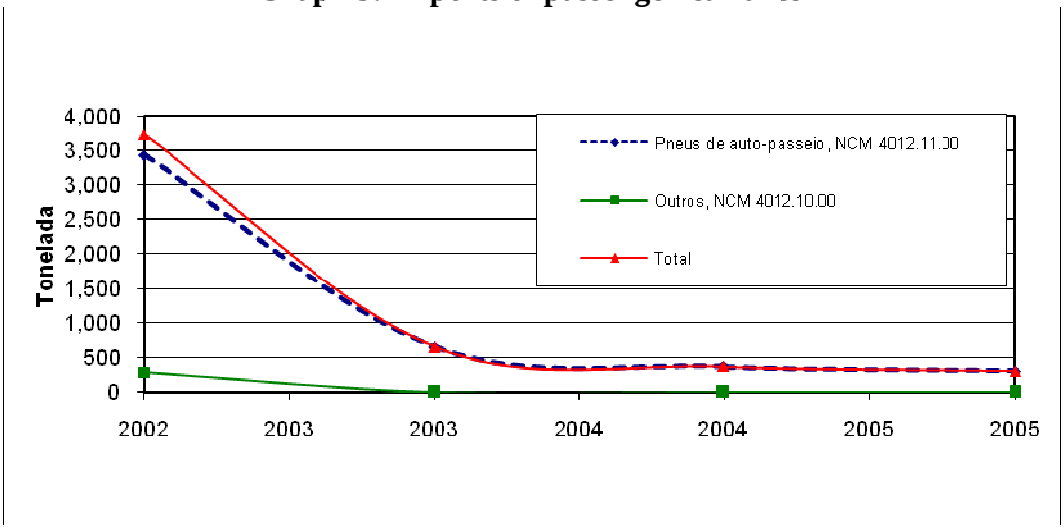
Memorandum from the Ministry of Environment's Ad Hoc Committee Concerning Trade Practices Maintained by Brazil Affecting Trade in Retreaded Tires, to the Ministry of Foreign Affairs (Mar. 20, 2006) (on file with author).

Graph 2 shows the total volume of retreaded tires, in tons, exported to Brazil from all countries and from the European Union separately. From the period between 1995 and 2004, the total volume of retreaded tires imported to Brazil reached its peak in 1998, when imports surpassed 25,000 tones. Of this total amount, more than 15,000 tons came from the European Union. In 1999, the graph points to a steady decline of retreaded tires imports in Brazil: total volume of imports dropped below 20,000 tons, while European Union's retreaded tires fell below 15,000 tons. In 1999, Brazil passed CONAMA's Resolution 258, which provides for the limitation and gradual elimination of waste tires. These data remained stable in 2000. From 2001 to 2003, the Brazilian Ministry of Development, Industry and Foreign Trade recorded further decreases of retreaded tires

imports to Brazil. In 2001 and 2002, the volume of total imports and imports from the European Communities coincided: imports dropped below 10,000 tons in 2001 and below 5,000 tons in 2002. This reduction may be associated with the 2000 ban on imported retreaded tires, which bans imports of retreaded tires and with the 2001 fines on importation, marketing, transportation, storage, keeping or keeping in warehouses of imported retreaded tires. Total volume of imports kept declining after 2002, and reached insignificant amounts of imports in 2003. This volume increased slightly in 2004.

Graph 3 shows a similar pattern with regard to European Union's exports to Brazil. However, the steady decline that started in 2000 reached the zero line in 2003 and so remained in 2004. 2005 data from the Ministry of Development, Industry and Foreign Trade show that the situation has remained stable; tire imports occurring at very insignificant levels (Graph 3).

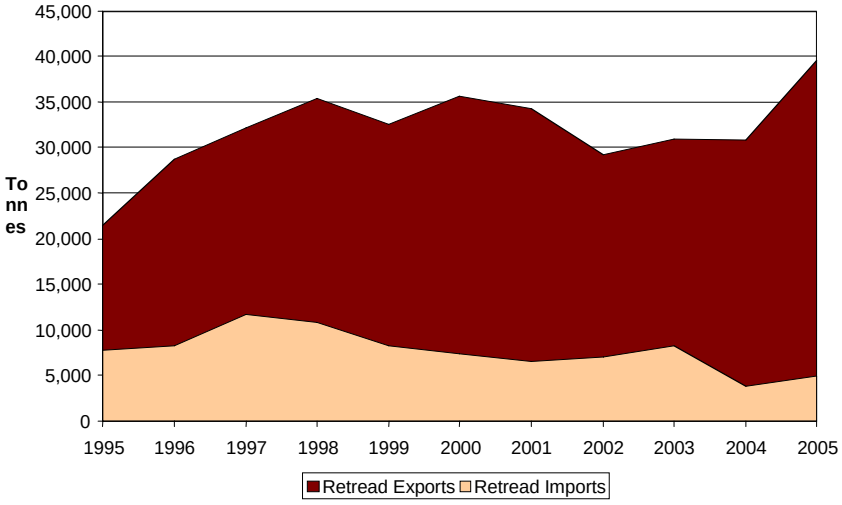
Graph 3: Imports of passenger-car tires



Memorandum from the Ministry of Environment's Ad Hoc Committee Concerning Trade Practices Maintained by Brazil Affecting Trade in Retreaded Tires, to Ministry of Foreign Affairs (Mar. 20, 2006) (on file with author).

Graph 4 shows the volume of imports and exports of European Union's retreaded tires from 1995 to 2005. The graph indicates a continuous export growth from 1995 to 1998; which, in tons, is equivalent to an increase from 20,000 to 35,000. During these years, Brazil maintained a liberal retreaded tire import policy. European Union's export volume dropped below the 35,000 tons level in 1999, but regained that level in 2000. In 2002, exports fell below 30,000 tons. However, 2005 marks a steady growth in retreaded tires exports of almost 40,000 tons. The levels of retreaded tires imports into the European Union, however, are quite disproportional to its exports. From 1995 to 2005, the European Union import volume has, on average, ranged between 5,000 to 10,000 tons. In 1997, the European Union surpassed the 10,000 tons mark; and it fell below 5,000 tons in 2004.

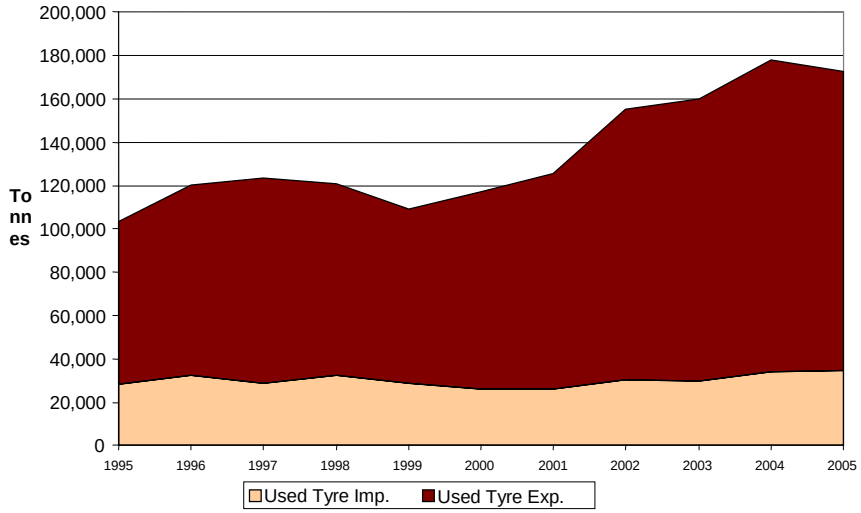
Graph 4: EC Retreaded Tire Imports & Exports



First Written Submission by Brazil to the Dispute Settlement Body of the World Trade Organization, Concerning Trade Practices Maintained by Brazil Affecting Trade in Retreaded Tires (Jun. 8, 2006) (on file with author).

Graph 5 shows the volume of imports and exports, in tons, of used tires in the European Union. Similar to what happens in the retreaded tire market, there is a disproportional difference between the export volumes to the volume of imported used tires. In 1995, the European Union exported a little over 1000,000 tons of used tires, but this number almost doubled in 2004, when it was exporting approximately 180,000 used tires. The importing sector, however, remained stable and at low levels. During the 10-year period considered, it oscillated near 30,000 tons.

Graph 5: EC Used Tire Imports & Exports



First Written Submission by Brazil to the Dispute Settlement Body of the World Trade Organization, Concerning Trade Practices Maintained by Brazil Affecting Trade in Retreaded Tires (Jun. 8, 2006) (on file with author).

While the volume of retreaded and used tires imported to the European Union's territory has remained stable (at least with regard to used tires) and low, exports of these same products have been quite high compared to their imports. The increase in the levels of retreaded and used tires exports and the maintenance of their imports at considerably low marks may be part of a European Union's policy oriented towards elimination of these products from their territories.

As discussed above, the panel in the retreaded tire dispute between Uruguay and Argentina did not analyze the economic impact of Argentina's trade measures.[512] However, Hermes Marcelo Huck, a member of the MERCOSUR panel that issued the decision, believes there was little if any trade impact in that case.[513] In 1999 and 2000, for instance, trade in retreaded tires among these two countries amounted to USD 50,000 (fifty thousand of American dollars).[514] Accordingly, Huck concluded that this litigation was in fact a strategic maneuver by Uruguay to preserve imports of retreaded tires from Uruguay to Brazil.[515] Even though there was a prior MERCOSUR arbitration award guaranteeing the right of Uruguay to export retreaded tires to Brazil, Uruguay did not want to leave any room for a different interpretation inside MERCOSUR.[516]

This section points to the following conclusions. First, the data made available by the Brazilian Ministry of Environment indicate that Brazil was successful in reducing imports of retreaded tires since the imposition of the import ban. However, despite specific prohibitions of imports of used tires, the country has imported a growing amount of used tires. Second, with relation to the European Union, available data shows a pattern of low and stable imports of used and retreaded tires. Available data also point to a significant disparity between low imports of retreaded and used tires and high exports of

[512] Interview with Dr. Hermes Marcelo Huck, MERCOSUR trade panelist in the retreaded tire dispute between Uruguay and Argentina, in São Paulo, Brazil (Mar. 10, 2006).
[513] *Id.*
[514] *Id.*
[515] *Id.*
[516] *Id.*

these same products. Exports of used tires have remained stable and unaffected by the Brazilian measures.

Concerning exports of retreaded tires, despite the European Union's claim that the Brazilian measures have had a negative impact on them, graph 4 has demonstrated that the European Union has been successful in finding alternative markets. With regard to the impact of Argentina's measures on Uruguay's trade, available information suggests that it was extremely small.

B. Environmental Aspects of the Retreaded Tires Dispute

As discussed in Chapter III, the MERCOSUR panel in the Argentina-Uruguay tire dispute found that the environmental risks posed by retreaded tires were neither serious nor irreversible. The WTO panel acknowledged the risks, but found that they were not sufficient to justify the restrictions on trade. As I show below, however, there is significant evidence to contradict these conclusions.

Trade in used and retreaded tires has become a huge environmental and public health problem in Brazil over the last decades. Retreaded tires, at first glance, do not impose any additional risk that new tires do not also cause. The main difference, however, is that retreaded tires become waste faster than new tires, thereby increasing the

generation of unnecessary additional tire waste. After new tires have reached the end of their first cycle, they can still be retreaded and reused. However, under international standards, passenger car tires may be retreaded only once before they become waste.[517]

Brazilian public administration has demonstrated concern with tire destination after it becomes waste. In 1991, Brazil prohibited imports of used tires. After a long discussion of whether retreaded tires fall under the category of used tires, it decided to expressly ban imports of retreaded tires as well. Brazil argues that avoiding the generation of additional waste is the reason behind the measures that ban imports of used and retreaded tires within its territory.[518]

The existence of tires in Brazilian territory, exacerbated by uncontrolled imports of used and retreaded tires, has several negative environmental and public health impacts.[519] First, the disposal of waste tires in landfills increases the risk of fires, which is a major cause of toxic gases, and water and soil contamination. Second, tires that are abandoned in "water courses" obstruct canals, streams, and "galleries" of pluvial waters,

[517] *See* UNECE Regulation No. 108 (1998), P 6.2.
[518] Interview with Haroldo de Macedo Ribeiro, First Secretary, Coordinator of the Department of Economics of the Brazilian Ministry of Foreign Affairs, in Brasília, Brazil (Mar. 21, 2006).
[519] *Pneus: Um Problema Ambiental e de Saúde Pública* [Tires: An Environmental and Public Health Problem] (Ministério do Meio Ambiente, Brasília, Brazil) 2006, at 11-12. *See also* Report from the Directorate-General for Trade of the European Commission on the Examination Procedure Concerning an Obstacle to Trade within the Meaning of Council Regulation (EC) No 3286/94 consisting of Trade Practices Maintained by Brazil Affecting Trade in Retreaded Tires, to the Trade Barriers Regulation Committee (Sept. 13, 2004) (on file with author) (stating that "waste tires that litter the countryside pose a significant environmental and public health problem in Brazil, notably that they can collect rain water and thus potentially provide breeding grounds for mosquitoes (aedes aegypti) that can spread dengue and in some circumstances urban yellow fever.").

contributing to floods. These floods impose serious damages to local population and incalculable costs to the public administration. Outdoor tire burning emits highly toxic substances, such as heavy metals, dioxins and furans, which are known causes for cancer and other diseases. Third, imports of previously used tires containing mosquitoes' eggs can cause new diseases and epidemics in Brazil. Tires irregularly stocked or discarded become ideal habitats for the procreation of mosquitoes responsible for spreading dengue and yellow fever.

Dengue fever has become an increasingly serious problem in Brazil. A research study conducted by the Brazilian Ministry of Health concluded that the number of dengue cases increased dramatically in Brazil between 2004 and 2005.[520] Between 1996 and 2002, Brazilian government's expenditures, with programs aiming at attacking and preventing dengue cases, increased by 284 percent.[521] In 2006, 70 percent of all resources transferred to States and municipalities to support control-epidemics programs concern dengue.[522] In 2003, the federal government spent R$ 903,000,000 (approximately USD 450,000,000) to fight dengue. In 2002, Brazil recorded 709,000 cases of dengue.[523]

[520] Memorandum from the Ministry of Environment's Ad Hoc Committee Concerning Trade Practices Maintained by Brazil Affecting Trade in Retreaded Tires, to the Ministry of Foreign Affairs (Mar. 20, 2006) (on file with author).
[521] *Id.*
[522] *Id.*
[523] *Id.*

A 2003 study conducted by the Brazilian Ministry of Health with 1,240 municipalities concluded that:[524] in 284, waste tires were the number one cause associated with dengue-spreading mosquitoes; in 491 municipalities, waste tires were the second major cause, and; in 465 municipalities waste tires accounted for the third most cited cause associated with the proliferation of dengue mosquitoes.

Table 4: The Dengue Epidemics in Brazil

Year	Notified Cases
1994	56.584
1995	137.317
1996	187.762
1997	249.239
1998	528.388
1999	209.668
2000	239.870
2001	428.117
2002	794.000
2003	346.118
2004	107.168

Memorandum from the Ministry of Environment's Ad Hoc Committee Concerning Trade Practices Maintained by Brazil Affecting Trade in Retreaded Tires, to Ministry of Foreign Affairs (Mar. 20, 2006) (on file with author).

Table 4 shows the number of notified dengue cases from 1994 to 2004. The epidemics grew from 56,584 cases, in 1994, to 528,388 in 1998. Notified dengue cases fell considerably in 1999, when 209,668 cases were recorded. However, from 1999 to 2002, notified dengue cases increased exponentially, reaching its peak in 2002, with 794,000 cases. On May 26 1999, CONAMA adopted Resolution 258, which provides for

[524] *Pneus: Um Problema Ambiental e de Saúde Pública* [*Tires: An Environmental and Public Health Problem*] (Ministério do Meio Ambiente, Brasília, Brazil, 2006), at 11.

the limitation and gradual elimination of waste tires, effective since 2002. In 2003, the number of notified dengue cases dropped to 346,118, and in 2004, to 107,168 cases. However, it should not go without saying that these numbers may conceal failures in the Brazilian Ministry of Health's information system.

In addition, Haroldo de Macedo Ribeiro of the Brazilian Ministry of Foreign Affairs expressed some certainties concerning the retreaded tires dispute.[525] First, Brazil is certain that retreaded tires imports increases the generation of unnecessary additional tire waste.[526] A retreaded tire is a good with a shorter duration given existing regulations that prohibits vehicle tires to undergo more than one reforming process. Thus, every retreaded tire that comes into Brazilian territory will complete its last "life-cycle" in the country and become waste.[527] Therefore, there is a certainty that, by importing retreaded tires, Brazil is generating additional amounts of waste.[528] Second, Brazil is certain that tire waste is very difficult to handle, given its toxic chemical components.[529]

Hermes Marcelo Huck, one of the MERCOSUR panelists in the dispute between Uruguay and Argentina, noted that scientific certainty about the negative environmental

[525] Interview with Diplomat Haroldo de Macedo Ribeiro, First-Secretary of the Brazilian Ministry of Foreign Affairs, in Brasília, Brazil (Mar. 21, 2006).
[526] *Id.*
[527] *Id.*
[528] *Id.*
[529] *Id.*

and public health effects supported Argentina's environmental claim.[530] In that case, Huck stated that retreaded tires amount to generation of unnecessary additional tire waste without feasible solutions; noting that it takes approximately 500 years for a tire to degrade, and alternative forms to eliminate these tires from the environment are not affordable.[531]

In conclusion, this Section has demonstrated that there is a real link between tire accumulation and risks to the environment and public health. Especially, it has pointed to the direct correlation between reduction of waste tire accumulation and reduction of dengue cases. This Section has also demonstrated that retreaded tires become waste much faster than new tires. Once these retreaded tires become waste, they contribute to the generation of waste tires; something Brazil is trying to avoid, given its toxic chemical components.

C. Alternative Means of Tire Disposal in Brazil

The WTO and MERCOSUR tribunals also focused on the need to pursue less-trade-restrictive alternatives to address the risks associated with retreaded tires. As I show in this section, however, all available alternatives would be significantly less effective than an import ban.

[530] Interview with Dr. Hermes Marcelo Huck, MERCOSUR trade panelist in the retreaded tire dispute between Uruguay and Argentina, in São Paulo, Brazil (Mar. 10, 2006).
[531] *Id.*

Article 1 of the 1999 disposal obligations provides that "manufacturers and importers of tires are obliged to collect and give an "environmentally adequate" final destination to waste tires within the Brazilian territory." According to Maria Gricia Grossi and Geraldo Siqueira of the Brazilian Ministry of the Environment, today there are no available alternatives to waste tire management that are, at the same time, "environmentally safe" and economically feasible.[532] At some point, every available alternative has some negative impact on the environment, particularly those processes that, under high temperatures, emit toxic substances and residues that require special treatment. Presently, Brazil has 5 available destinations for waste tire:[533] Co-processing of residues in cement kilns; Co-processing in the Petrobras[534] schist plant located in the State of Paraná; Use in the fabrication of rubber-asphalt; Lamination; Regeneration. According to ANIP, lamination is the main destination of waste tires in Brazil, followed their use in the co-processing of residues in cement kilns and co-processing in the Petrobras schist plant located in the State of Paraná.

First, there is evidence that the burning of tire casings in cement kilns emits highly polluting chemical substances and compounds, classified as Persistent Organic

[532] Interview with Maria Grícia Grossi and Geraldo Siqueira, Managers of the Secretary of Environmental Quality, Brazilian Ministry of Environment, in Brasília, Brazil (Mar. 21, 2006).
[533] *Id.*
[534] Petrobras stands for Petróleo Brasileiro S.A. It was created in 1953 as the state-owed oil company to carry out the activities in a monopolistic manner. For a general account of the oil and gas scenario in Brazil, see Marilda Rosado de Sá Ribeiro, *The New Oil and Gas Industry in Brazil: An Overview of the Main Legal Aspects*, 36 TEX. INT'L L. J. 141 (2001).

Polluting Substances and Compounds (*Poluentes Orgânicos Persistentes* - POPs). In light of the harmful effects caused by these POPs, countries all over the world have developed maximum emission standards and rules for monitoring their compliance. In Brazil, CONAMA Resolution 264 deals with processes, criteria, and technical aspects concerning environmental licensing for co-processing of residues in ovens. CONAMA Resolution 316 regulates the processes and criteria for the functioning of systems regarding thermic treatment of residues. In Brazil, there is only one lab that monitors the amount of dioxin and furan's emissions. This factor alone makes impractical large scale monitoring. Moreover, while Brazil sets emission-levels for dioxin and furans at 0.5 ng/Nm3, developed countries work with numbers that are 5 times lower. In addition, initial investment in control equipments (filters), required from cement plants, is high and tends to augment more, provided that pollutant's emission levels become increasingly restrictive. In the present days, the gas purification system installed in these special ovens contains only dust retention filters and chimney, given that the emission of gases is so elevated that it becomes technical and economically impractical to proceed otherwise. Another limitation associated with this technique of casings' use is that the substitution of coal by waste tires requires that the cement plants have available a constant volume of shredded tire to feed its industrial unities. However, Brazil does not have an efficient collection and storage system. Finally, data from the Brazilian Ministry of the Environment [535]shows that from a total of 47 cement plants; only 19 are licensed to co-process industrial residues. Not all of these 19 plants are presently burning tires; either

[535] *Id.*

because they do not have the necessary security equipment to reduce gas emissions, because tire burning has not proven economically viable; or, still, due to these cement plant's belief that they lack a continuous stream of casings.

A second available destination for tire casings in Brazil is co-processing them in the Petrobras schist plant located in the State of Paraná. However, the operational capacity of this plant is limited to 3.6 million unities of casings per year. The co-processing of these tires is able to extract oil from only 50 percent of that product; approximately 40 percent is residues, which has to be treated in an environmentally sound way. From an environmental and public health perspective, both oil and residues that result from this type of co-processing contain highly toxic metals.

A third and popular way of transforming waste tires into something else useful is to use in the fabrication of rubber-asphalt. In the past years, this technique has proven to be economically viable and environmentally safe. While conventional asphalt is obtained from crushed rock, sand and a sticky substance that mixes the two previous components; rubber-asphalt, on its turn, is made through three processes: dry, humid and terminal-blend. In the dry process, the powder of the tire substitutes a small amount of the mineral-aggregate. This type of rubber-asphalt is inferior to the one obtained through the humid and terminal-blend processes, but still superior than conventional asphalt. In the humid process, tire powder makes 18 to 20 percent of the substance that sticks the asphalt mixture. The mixture is heated to 190 degrees Celsius in a closed compartment, in order

not to oxidize the mixture. The downside of this type of process is that the place of application of the asphalt needs to be near the plant where it is made, because this asphalt mixture looses its viscosity once it cools down. The terminal-blend process addresses the problem of lack of viscosity present in the humid process. It utilizes a smaller amount of tire powder: 12 to 15 percent of the substance that sticks the asphalt mixture, besides extending components. In this manner, the asphalt mixture may be heated while it is transported to its place of application without losing its physical properties. This process is utilized by Petrobras.

Fourth, lamination appears as another way of transforming waste tires. Lamination consists of the mechanical process that results in the manufacture of sole for shoes, parceling for sofas and others. Finally, regeneration is another alternative destination of waste tires. Regeneration is the substitution of new rubber by regenerated rubber. This rubber is used in the manufacturing of products such as carpets and rug mats, industrial floors, sport courts, automotive parts and others.

Table 5 shows destinations of the collected waste tires within the Brazilian territory. In 2002, lamination accounted for the destination of 60 percent of waste tires; co-processing of residues in cement kilns accounted for 25 percent; co-processing in the Petrobras schist plant located in the State of Paraná made 1 percent of that destination; and other destinations accounted for the remaining 14 percent. In 2003, the amount of waste tires used for lamination dropped to 44 percent, increased to 38 percent in cement

plants and to 5 percent in the schist business, while it dropped to 13 percent in other uses. In 2004, 60 percent of waste tires went to lamination, 32 percent to cement plants, 0.2 percent to the schist industry, and 8 percent of the casings went to other uses.

Table 5: Waste tires Destination in Brazil from 2002 to 2004

	2002		2003		2004	
Destination	**Ton.**	**%**	**Ton.**	**%**	**Ton.**	**%**
Lamination	59.766,00	60	27.099,82	44	81.617,33	60
Cement kilns	24.298,30	25	23.327,70	38	42.886,07	32
Schist	891,60	1	3.065,00	5	318,53	0,2
Others	13.870,20	14	8.143,00	13	10.177,00	8
Total	98.826,10	100	61.635,52	100	134.998,93	100

Memorandum from the Ministry of Environment's Ad Hoc Committee Concerning Trade Practices Maintained by Brazil Affecting Trade in Retreaded Tires, to the Ministry of Foreign Affairs (Mar. 20, 2006) (on file with author).

The First-Secretary of Brazil's Ministry of Foreign Affairs stated that Brazil supports the WTO jurisprudence that a trade restrictive measure is only justified in face of the inexistence of other economically feasible measures that can accomplish the same level of environmental protection with less impact on trade.[536] In this sense, Brazil also welcomes the 1999 disposal obligations; they are innovative and introduced in the country environmental responsibility on the part of the manufacturer and importer of tires. However, such obligations have their problems. For instance, they impose responsibility on the producer and importer of new tires to collect and dispose waste tires. This is what the 1999 disposal obligations do. On the other hand, they do not address the

[536] Interview with Diplomat Haroldo de Macedo Ribeiro, First-Secretary of the Brazilian Ministry of Foreign Affairs, in Brasília, Brazil (Mar. 21, 2006).

policy objective pursued by Brazil, which is non-generation of unnecessary additional tire waste.[537] Thus, the 1999 disposal obligations operate from the moment the country has imported the future waste, and the Brazilian measures intend to avoid the unnecessary generation of waste.[538] The problem is accentuated by the fact that once a country imports a retreaded tire, it can no longer export it back after it has been used, due to a prohibition present on the Basel Convention.

In the MERCOSUR retreaded tires dispute between Uruguay and Argentina, at least one alternative solution was considered. In that dispute, Argentina said it would accept Uruguayan retreaded tires conditioned to the fact that Uruguay would retread Argentinean used tires.[539] As Uruguay pointed out, however, this alternative had high economic costs. First, Argentinean tires were more expensive than tires sold by the competition (mostly Europeans).[540] Second, Uruguay claimed that a large amount of South American tires are unsuitable for retreading, given road conditions in these countries.[541]

This section has demonstrated that once a retreaded tire becomes waste, there are several alternatives to it. In the case of Brazil, waste tire may be used in co-processing of residues in cement kilns, co-processing in the Petrobras schist plant located in the State of

[537] *Id.*
[538] *Id.*
[539] Interview with Dr. Hermes Marcelo Huck, MERCOSUR trade panelist in the retreaded tire dispute between Uruguay and Argentina, in São Paulo, Brazil (Mar. 10, 2006).
[540] *Id.*
[541] *Id.*

Paraná, use in the fabrication of rubber-asphalt, lamination, and regeneration. However, as has been demonstrated, several of these less-trade restrictive means of addressing the problem of waste tire cause environmental problems of their own. Most importantly, as noted by the First-Secretary of the Brazilian Ministry of Foreign Affairs, none of these less-trade restrictive means of resolving the problem of waste tire address the very problem that the import ban is intended to eliminate, which is additional generation of waste tires.[542] All these alternative means of waste tire disposal tell one is what to do with the tires once you have them inside your territory. However, they do not address the problem of reducing the generation of waste tires. Another alternative to the import ban would be to permit importation of retreaded tires made from domestically-produced tires. As shown by the discussion of the Argentina-Uruguay dispute, however, this alternative has high economic costs.

D. Political Aspects of the Retreaded Tires Dispute

As discussed above, the MERCOSUR Appellate Body concluded that the measure could not be based on environmental concerns if it was also influenced on economic concerns. Similarly, the WTO panel concluded that Brazil's import ban was a "disguised" restriction on trade, because Brazil did not ban other products that posed similar environmental risks (domestically-produced retreaded tires and used tire imports.) When asked, however, a panelist that participated in the decision concerning Argentina's

[542] Interview with Diplomat Haroldo de Macedo Ribeiro, First-Secretary of the Brazilian Ministry of Foreign Affairs, in Brasília, Brazil (Mar. 21, 2006).

import ban admitted that the measure was probably motivated by purely environmental interests, since there was very little retreaded tire trade between Argentina and Uruguay.[543]

In Brazil, the tire industry is divided into two main groups: the group that manufactures new tires and the group that retreads tires. The first group is dominated by foreign companies with branches in Brazil, such as Bridgestone/Firestone, Goodyear, Michelin and Pirelli.[544] The interests of these companies are represented by the *Associacao Nacional da Industria de Pneumaticos* [ANIP], which fully supported Brazil's defense of the import ban in the WTO.[545] The second group, on the other hand, consists of small to medium size Brazilian companies specialized in retreading tires for sale domestically. The interests of these companies are represented by two different associations: the *Associacao Brasileira do Segmento de Reforma de Pneus* [ABR]; and, more recently, by the *Associacao Brasileira da Industria de Pneus Remoldados* [ABIP]. On the one hand, these companies benefit from a ban on imports of retreaded tires, which directly compete with their products. On the other hand, Brazilian retreaders are highly dependent on imported used tires, which they use to make their products, and have vigorously fought for their importation before Brazilian courts since 1991.[546] A ban on

[543] Interview with Dr. Hermes Marcelo Huck, MERCOSUR trade panelist in the retreaded tire dispute between Uruguay and Argentina, in São Paulo, Brazil (Mar. 10, 2006).
[544] Interview with Vilien José Soares, President of the National Association of the Tire Industry (ANIP), in São Paulo, Brazil (Mar. 9, 2006).
[545] *Id.*
[546] *Id.*

retreaded tire imports could lend support to arguments for a ban on used tire imports, since both products pose similar environmental risks.

In my interview with Vilien Jose Soares, the President of ANIP, I learned that ANIP approved of the policy package that resulted in the import ban on foreign retreaded tires.[547] He strongly suspects that a lobby from the Brazilian retreaded tires industry (ABIP) is helping to maintain the import ban, in order to protect itself from foreign competition.[548]

However, Francisco Simeao, the President of ABIP, was strongly opposed to Brazil's import restrictions on retreaded tires.[549] In his view, the 2001 presidential decree authorizing fines on importation, marketing, transportation, and storage of retreaded tire imports was unlawful, because it did not implement legislation as required by the Brazilian Constitution.[550] He also suggested that the Brazilian legislative branch had been captured by foreign manufacturers of new tires that conduct business in Brazil,[551] and that the Brazilian measures that ban imports of retreaded tires were entirely based on the

[547] *Id.*
[548] *Id.* ("ANIP's members strongly suspect that BIPAVER is responsible for any sort of lobby. In addition, one of the member companies of BIPAVER is the English Colway. A few years ago, Colway has made a joint venture in Brazil, which originated the Brazilian BS Colway. Although this joint venture no longer exists in Brazil, BS Colway has remained in operation. ANIP members suspect that Colway and BS Colway maintain unofficial arrangements, with consequent political lobby in Brazil."). *Id.*
[549] Interview with Francisco Simeão, President of the Brazilian Association of the Retreaded Tire Industry (ABIP), in Piraquara, Brazil (Mar. 20, 2006).
[550] *Id.*
[551] *Id.*

commercial interests of foreign manufacturers of new tires located in Brazil.[552] When asked whether the accessibility of foreign manufacturers of new tires to the Brazilian government was attributable to institutional mechanisms or personal contacts, ABIP's President stated that the CEOs of Pirelli, Bridgestone/Firestone, Goodyear and Michelin have been paying visits to Brazilian Senators, Congressmen and public institutions connected to the tire industry.[553]

However, Brazilian governmental authorities argue that the import ban on retreaded tires is not supported by domestic economic interests. Maria Gricia Grossi and Geraldo Siqueira of the Ministry of Environment stated that purely environmental and public health interests support the import ban on retreaded tires.[554] The mere fact that the Brazilian measures were initiated under the competency of the Ministry of Development, Industry and Foreign Commerce does not necessarily indicate this is a commercial dispute.[555] It is their opinion that the measure was issued by this Ministry because it has direct impacts on foreign commerce, regardless of its genuine environmental interests.[556] Haroldo de Macedo Ribeiro of the Ministry of Foreign Affairs agrees with the Ministry of Environment reasoning, since only the Ministry of Development, Economics and

[552] Interview with Francisco Simeão, President of the Brazilian Association of the Retreaded Tire Industry (ABIP), in Piraquara, Brazil (Mar. 20, 2006).
[553] *Id.*
[554] Interview with Maria Grícia Grossi and Geraldo Siqueira, Managers of the Secretary of Environmental Quality, Brazilian Ministry of Environment, in Brasília, Brazil (Mar. 21, 2006).
[555] *Id.*
[556] *Id.*

Foreign Commerce has authority to issue regulations to Customs.[557] Thus, it should not be assumed that a regulation issued by the Ministry of Development, Industry and Foreign Commerce is commercial in its origin.[558]

When I asked why Brazil failed to bring the environmental exception in the MERCOSUR Brazil-Uruguay decision, Maria Gricia Grossi and Geraldo Siqueira of the Brazilian Ministry of Environment responded that they were not aware of the dispute was taking place. As it has been noted by them, the Ministry of Environment only became aware of the MERCOSUR retreaded tire dispute after the panel report of the Uruguay-Brazil dispute had been issued.[559] This shows the lack of communication and articulation among the several Brazilian Ministries.

This Section has demonstrated that the Brazilian ban on retreaded tires touches different sectors of the Brazilian domestic industry for new and retreaded tires. First of all, the Brazilian ban on imports of retreaded tires favors the domestic industry of new tire manufacturers. Once imports of retreaded tires are prohibited, there is a bigger market share for new tires, which generally are at a competitive disadvantage with respect to retreaded tires because of the significant price difference between retreaded and new tires, and socio-economic conditions in Brazil. On the other hand, the Brazilian

[557] Interview with Diplomat Haroldo de Macedo Ribeiro, First-Secretary of the Brazilian Ministry of Foreign Affairs, in Brasília, Brazil (Mar. 21, 2006).
[558] *Id.*
[559] Interview with Maria Grícia Grossi and Geraldo Siqueira, Managers of the Secretary of Environmental Quality, Brazilian Ministry of Environment, in Brasília, Brazil (Mar. 21, 2006).

retreaded tire industry does not support the ban on retreaded tire imports, apparently due to their concerns that this ban may lead to a similar ban on imports of the used tires they use to make their products. On the other hand, despite strong suspicions by representatives of new tire manufactures and reformers of used tires in Brazil that the Brazilian import ban on retreaded tires resulted from strong industry lobbies in the Brazilian Congress and Senate, the representatives of Brazilian Ministry of Environment and Foreign Affairs consistently deny this. Thus, it is not possible to determine a single political motive that led to the Brazilian import restrictions.

E. Institutional Aspects of the Retreaded Tires Dispute

As discussed in Chapters III and IV, both WTO and MERCOSUR have been trying to develop solutions for trade-environment conflicts. However, these solutions have proven ineffective. In the WTO case, a Committee on Trade and Environment (CTE) was established, in accordance with the Preamble to the WTO Agreement, which expressly recognizes the objective of sustainable development.[560] The CTE was responsible for addressing seven issues considered to be central in trade-environment conflicts.[561] As Professor Hansen has argued, "the CTE has been unable to develop

[560] The Preamble provides: "Recognizing that their relations in the field of trade and economic endeavor should be conducted with a view to raising standards of living … while allowing for the optimal use of the world's resources in accordance with the objective of sustainable development, seeking both to protect and preserve the environment…"

[561] The issues included: 1) the relationship between the provisions of the multilateral trading system and trade measures for environmental purposes, including those pursuant to multilateral environmental agreements; 2) the relationship between environmental policies relevant to trade and environmental

solutions to any of the conflicts between trade and environmental rules."[562] MERCOSUR has actually gone much further than the WTO in trying to develop ways to solve trade-environment disputes. Its Preamble expressly states that economic development must be achieved in conjunction to "the preservation of the environment." In addition, MERCOSUR has established a Working Group on the Environment charged with functions similar to those under the CTE. MERCOSUR Member Countries have even signed an Environmental Frame Agreement stating that sustainable development policies shall not include measures that "unjustifiably and arbitrarily" restrict or distort the free circulation of goods and services within MERCOSUR Member States.[563] However, the Working Group has produced little results,[564] and the MERCOSUR Appellate Body did not even mention the Environmental Frame Agreement in its decision.

There are serious concerns about the legitimacy of these institutions to deal with environmental interests. Trade-environment conflicts address disputes that carry BOTH

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measures with significant trade effects and the provisions of the multilateral trading system; 3) the relationship between the provisions of the multilateral trading system and a) charges and taxes for environmental purposes, and b) requirements for environmental purposes relating to products, including standards and technical regulations, packaging, labeling and recycling; 4) the relationship between the provisions of the multilateral trading system with respect to the transparency of trade measures used for environmental purposes and environmental measures and requirements that have significant trade effects; 5) the relationship between the dispute settlement mechanisms in the multilateral trading system and those found in multilateral environmental agreements; 6) the effect of environmental measures on market access, especially in relation to developing countries, in particular to the least developed among them, and environmental benefits of removing trade restrictions and distortions; and 7) the issue of exports of domestically prohibited goods. *See* Weiss & Jackson, *supra* note 5, at 25-26.

[562] *See* Hansen, *Transparency*, *supra* note 7, at 1036.

[563] Article 3 of the MERCOSUR Environmental Frame Agreement.

[564] *See See* Maristela Basso, *Livre Circulação de Mercadorias e Proteção Ambiental no MERCOSUL* [*Free Trade in Goods and Environmental Protection in MERCOSUR*], *in* MERCOSUL: SEUS EFEITOS JURÍDICOS, ECONÔMICOS E POLÍTICOS NOS ESTADOS-MEMBROS [MERCOSUL: ITS LEGAL, ECONOMIC AND POLITICAL EFFECTS ON THE MEMBER COUNTRIES] 408 (Maristela Basso ed., 1997).

trade and environmental interests. WTO and MERCOSUR have taken for granted that they are the most appropriate forum to address these disputes. However, critics have pointed out that trade institutions have little expertise in environmental regulation. This type of concern has even led some scholars to propose the creation of a new Global Environmental Organization to avoid trade-environment disputes.[565]

In addition, MERCOSUR has other institutional and political weaknesses that need to be taken into account. As Professor Jaeger Junior pointed out, since the creation of MERCOSUR, legal scholars have indicated that a supranational law making body is needed.[566] So far, this has not happened, however. Although MERCOSUR rules enable the CMC and the GMC to issue legally binding Decisions and Resolutions, this is not always the case.[567] Although CMC Decisions have direct effect on Member States, Professor Lima Marques has shown that, in practice, the only legally binding Decisions of the CMC are those that are known by the judge who applies it.[568] GMC Resolutions do not have direct effect in the Member Countries' laws, and are not effective within MERCOSUR countries, unless they are internalized by all Member States.[569]

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[565] ESTY, GREENING THE GATT, *supra* note 7, at 4.
[566] Augusto Jaeger Junior. Recentes desenvolvimentos no MERCOSUL [Recent Developments in MERCOSUR], *in* ESTUDOS DE DIREITO INTERNACIONAL: ANAIS DO 5 CONGRESSO BRASILEIRO DE DIREITO INTERNACIONAL 254 (Wagner Menezes ed., 2007)
[567] Claudia Lima Marques, *The Status of Consumer Protection Policy in MERCOSUR* 11(Dec. 10, 2007) (unpublished manuscript, on file with author).
[568] *Id.*
[569] Ouro Preto Protocol, art. 40, *available at* http://www.mercosur.int/msweb/portal%20intermediario/pt/index.htm (last visited Oct. 30, 2007).

MERCOSUR regulations do not stipulate a time limit for a country to internalize MERCOSUR laws or regulations.[570]

On the other hand, Articles 26 and 29 of the Olivos Protocol provide that compliance with MERCOSUR panel and Appellate Body reports is mandatory unless the panel or the Appellate Body decides otherwise within 30 days after the decision has been issued.[571] According to Professor Araujo, Member Countries have been complying with the panel and Appellate Body reports within the established time limit.[572]

Recently political support for MERCOSUR has been negatively affected by a number of crises within its Member States.[573] In 1999, for example, for economic and political reasons, Brazil devalued its currency and MERCOSUR issued regulations concerning the effects of the devaluation on MERCOSUR trading partners. Argentina could not adjust itself to the new Brazilian system and imposed safeguard measures on Brazil. Several sectors were negatively affected by these measures, especially trade in shoes, chicken, and textiles. This incident almost ceased the existence of MERCOSUR.[574] In 2000, Argentina considered that its participation in MERCOSUR was harmful to its economy, and became non-cooperative with the economic block, seriously

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[570] *Brazil – Measures Affecting Imports of Phytosanitary Products, supra* note 429, P 5.6.
[571] Article 29 of the Olivos Protocol.
[572] *See* Nadia de Araujo, *O Tribunal Permanente de Revisao do MERCOSUL: Analise dos Laudos Arbitrais, Sua Ligacao com a Common Law e Algumas Ideias para o Futuro* [*The MERCOSUR Appellate Body: Analysis of the Reports, Its Connection with the Common Law and Some Ideas for the Future*], *in* DIREITO INTERNACIONAL 34, 43 (Antonio Paulo Cachapuz ed., 2006).
[573] Jaeger Junior, *supra* note 565, at 257.
[574] *Id.*

impairing the institution.[575] Moreover, a new economic crisis hit Argentina in 2001, slowing down the talks into making MERCOSUR a full Common Market in the 21st century.

Political support for MERCOSUR was further weakened by Brazil-Uruguay decision concerning imports of retreaded tires, which was strongly criticized by environmentalists and public interests groups.[576] In my interview with Maria Gricia Grossi and Geraldo Siqueira, of the Brazilian Ministry of Environment, they both have expressed strong negative views concerning the MERCOSUR Brazil-Uruguay decision,[577] as did a number of newspaper accounts.

These institutional weaknesses in both WTO and MERCOSUR need to be taken into account by WTO and MERCOSUR trade tribunals to avoid a political backlash similar to that pursued by the Tuna-Dolphin decision in GATT.[578] The legitimacy of both the WTO and MERCOSUR as the right institutions to deal with trade-environment disputes has been challenged. Despite its strong treaty provisions, MERCOSUR has

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[575] *Id.* at 258.
[576] Silvio Bressan, *Brasil Pode Virar "Lixão" Mundial de Pneus: Com 100 Milhões de Carcaças, País Corre o Risco de Receber Sobras da Europa Via Mercosul* [*Brazil May Become World's Waste Tires Dump: With 100 Million Casings, Country Receiving Unused Tires from Europe via Mercosul*], Jornal O Estado de São Paulo [The State of São Paulo Newspaper], 03.17.2003.
[577] Interview with Maria Grícia Grossi and Geraldo Siqueira, Managers of the Secretary of Environmental Quality, Brazilian Ministry of Environment, in Brasília, Brazil (Mar. 21, 2006).
[578] Hansen, *supra* note 7, at 1030 (noting that "[t]he Tuna-Dolphin decision was immediately decried by environmentalists and other public interest groups, who criticized the panel's incursion on the United States' 'sovereignty' over access to its market, and its failure to acknowledge developments in international environmental law.)"

failed to achieve a regional environmental policy, and is marked by several other institutional failures, such as the ineffectiveness of its regulations within the Member Countries. Although Member Countries have so far complied with the rulings of the panels and Appellate Body report, the Brazil-Uruguay decision has undermined political support for MERCOSUR.

F. Summary

This Chapter has demonstrated that the impact of the Brazilian import ban on trade was relatively small; that the environmental risks associated with imports of retreaded tires were certain and significant; that less-restrictive alternatives would be less effective in regulating these risks; that the ban was not aimed at protecting the domestic retreaded tire industry; and that the WTO and MERCOSUR decisions have undermined political support for international institutions that badly need such support.

In Section A, I have showed that the Brazilian import ban has not had a serious or irreversible economic impact on the European Union, since it has been successful in finding alternative markets. Moreover, available information indicates the impact of Argentina's measures on Uruguay's trade is negligible.

In Section B, I also demonstrated that there is a real link between tire accumulation and risks to the environment and public health, and a direct correlation

between reduction of waste tire accumulation and reduction of dengue cases. Retreaded tires become waste much faster than new tires. Once these retreaded tires become waste, they contribute to the generation of waste tires, which have toxic chemical components.

Section C demonstrated that less-trade restrictive means of addressing the problem of waste tire cause environmental problems of their own, and are not economically feasible for developing countries. Most importantly, none of these less-trade restrictive alternatives address the very problem that the import ban is intended to eliminate, which is additional generation of waste tires. They only address how to dispose of tires once they are inside your territory, not how to prevent the introduction of additional waste tires in that territory. Finally, although countries could address this problem by sending their used tires abroad to be retreaded and then re-importing the retreaded tires, this alternative has high economic costs.

Section D showed that the political analysis of the Brazilian import ban is far more complex than suggested by the MERCOSUR and WTO analysis. In fact, Brazilian producers of retreaded tires do NOT support the Brazilian import ban. This is because they are concerned that the ban may be extended to imports of used tires, which they use to make their retreaded tires. On the other hand, although the Brazilian government denies this, it is possible that the import ban resulted from strong lobbying by foreign producers of new tires.

Finally, Section E showed the weakness of WTO and MERCOSUR institutions. In the special case of MERCOSUR, the institutional failures go well beyond their treatment of trade-environment disputes and include the inability to make its regulations effective within its Member Countries. Moreover, I have shown the legitimacy of these institutions is threatened by domestic political and economic problems faced by the MERCOSUR countries, and may be further undermined by the Brazil-Uruguay decision.

Drawing from these lessons, the tribunals could have achieved significant welfare gains by ruling in favor of the Brazilian ban in the tire dispute. In order to solidify political support for the WTO and MERCOSUR, these lessons should be taken into account in future cases involving conflicts between trade and environmental concerns.

Conclusion

This dissertation has addressed the issue of whether the WTO and MERCOSUR decisions in the retreaded tire disputes can be justified in light of the scholarly literature on the trade-environment conflict and on regulatory competition. Chapter I has explained the framework that has arisen for analyzing trade-environment conflicts in the WTO. Chapter II has examined the parallel framework that has arisen under MERCOSUR. These two chapters show that there are similarities and differences between the WTO and MERCOSUR approach to trade-environment. Both the WTO and the MERCOSUR frameworks recognize that the goal of economic development must be achieved together with competing goals such as the protection of the environment. In addition, both the WTO and MERCOSUR provide exceptions to the general goal of trade liberalization in order to protect the environment. Moreover, like the WTO Dispute Settlement Understanding, MERCOSUR dispute settlement also permits disputes to be settled by ad hoc trade panels, subject to review by a permanent Appellate Body.

Chapter III dealt with the MERCOSUR decisions relating to trade in retreaded tires. In the first decision, the tribunal did not analyze environmental interests, because Brazil failed to bring them to the tribunal's attention. In the second case, the newly formed MERCOSUR Appellate Body found that Argentina's ban on retreaded tire imports violated MERCOSUR law because: 1) the measure was motivated by both environmental and economic concerns; 2) the alleged harm to the environment was

neither serious nor irreversible; and 3) the import ban did not prevent the alleged harm to the environment.

Chapter IV discussed the WTO panel report, which concluded that the Brazilian import ban was applied in a manner that constituted unjustifiable and arbitrary discrimination, and a disguised restriction on international trade. The panel did not take into account the fact that the measure was issued by a developing country, or consider the social, political and economic difficulties such countries face in fully implementing their environmental policies.

Chapter V then examined whether the literature on regulatory competition, which suggests that there are significant welfare gains to be derived from allowing a proliferation of different standards to be adopted by different governmental authorities. In the case of trade and environment conflicts, these gains will depend on a number of factors, including: a) the impact on trade; b) the extent and certainty of the environmental risks; c) availability of less-restrictive alternatives for regulating these risks; d) the political obstacles to effective environmental regulation; and e) the relative strengths and weaknesses of MERCOSUR and WTO institutions.

After explaining the main lessons trade tribunals should draw from regulatory competition, Chapter VI applied each one of the lessons in the specific case of retreated tires. I concluded that the test applied by WTO and MERCOSUR gives insufficient

weight to the lessons learned from regulatory competition, and that as a result the WTO and MERCOSUR decisions may have been wrongly decided.

The general conclusion to be drawn from this dissertation is that future WTO and MERCOSUR tribunals deciding trade and environment disputes should give greater weight to the potential benefits to be gained from allowing a proliferation of different environmental approaches, and engage in more careful analysis of the actual economic impact of a challenged measure; the extent and scientific certainty of the environmental risk; the environmental and political obstacles to pursuing less-restrictive alternatives in developing countries; and the fragility of political support for WTO and MERCOSUR institutions.

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Vita

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